

Limited Site Investigation

North Carolina Employment Security Commission Property

Raleigh, Wake County, North Carolina

Terracon Project No. 70167318

September 22, 2016



Prepared for:

North Carolina Department of Administration
Raleigh, North Carolina

Prepared by:

Terracon Consultants, Inc.
Raleigh, North Carolina

terracon.com

Terracon

Environmental



Facilities



Geotechnical



Materials

September 22, 2016



North Carolina Department of Administration
State Property Office
1321 Mail Service Center
Raleigh, North Carolina

Attn: John Webb
E: john.webb@doa.nc.gov

Re: Limited Site Investigation
NC Employment Security Commission Property
700 Wade Avenue
Raleigh, Wake County, North Carolina
Terracon Project No. 70167318

Dear Mr. Webb:


Terracon Consultants, Inc. (Terracon) is pleased to submit this Limited Site Investigation for the above referenced site. This assessment was performed in accordance with Terracon's Proposal No. P70167318, dated June 10, 2016.


Terracon appreciates the opportunity to provide these services. If you have any questions concerning this report or need additional information, please contact us at 919-873-2211.

Sincerely,

Terracon


Deanna Metivier
Field Geologist


Casey M. Portela
Staff Geologist


Michael T. Jordan, PG
Senior Project Geologist

Attachments



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**LIMITED SITE INVESTIGATION
NORTH CAROLINA EMPLOYMENT SECURITY COMMISSION PROPERTY
700 WADE AVENUE
RALEIGH, WAKE COUNTY, NORTH CAROLINA
Terracon Project No. 70167318
September 22, 2016**

1.0 INTRODUCTION

1.1 Project Information

The site consists of a 15.84-acre parcel located at 700 Wade Avenue in Raleigh, Wake County, North Carolina (Wake County Parcel PIN 1704253378). The site is improved with an approximately 300,000-square foot professional office building and approximately 12,000-square foot maintenance building. An approximate east-west oriented intermittent stream that drains into Pigeon Branch Creek is located on-site near the northern site boundary. Portions of the stream are culverted. The site is currently occupied by the State of North Carolina's Employment Security Commission (NC ESC). The location of the site and site layout are shown on **Exhibits 1** and **2**.

Terracon completed a Phase I Environmental Site Assessment (ESA) dated April 15, 2016 (Terracon Project No. 70167125). Three on-site recognized environmental conditions (RECs) were identified:

- n An open leaking underground storage tank (LUST) Incident #26194 with petroleum impacts in soil and groundwater above regulatory standards associated with a former 280-gallon gasoline underground storage tank (UST);
- n A lack of information regarding the potential historical use of chlorinated solvents in on-site printing operations since the early 1980s (i.e. degreasers, parts cleaners, and/or solvent-based inks); and
- n The presence of tetrachlorethane in groundwater samples collected from monitoring well SW-1 at concentrations above the current groundwater quality standard in samples collected in 2004 and 2005. Incident files indicate that SW-1 was abandoned in 2006 for installation of an emergency generator.

Additionally, the following historical recognized environmental condition (HREC) was identified in connection with the site:

- n The closed LUST Incident #23869 with a no further action (NFA) letter for five former fuel oil USTs located in the vicinity of the on-site maintenance building.

Based on a review of documents completed during Terracon's Phase I ESA, the 280-gallon gasoline UST had been utilized since the mid-1980s and was reportedly removed in 2003. Approximately eight cubic yards of soil were excavated during UST removal and a soil sample collected from beneath the UST indicated the presence of benzene, xylenes,

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1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene at concentrations above their respective North Carolina Department of Environmental Quality (NCDEQ) – UST Section soil-to-groundwater maximum soil contaminant concentrations (MSCCs). Subsequently, several shallow Type II monitoring wells, a Type III monitoring well (DW-1), and a recovery well (RW-1) were installed in 2003. Additionally, six soil borings were advanced around the former UST. The extent of soil contamination was estimated to be approximately 12 feet by 20 feet and extend to a depth of 27 feet below land surface (bls) or approximately 240 cubic yards. The contaminated soil was reportedly located too close to the on-site structure to be removed safely and maintain the structural integrity of the building. The site was classified as intermediate risk by NCDEQ due to the presence of a tributary of Pigeon House Branch situated within 500 feet of the source area (EEC Inc., 2004).

This limited site investigation (LSI) was completed to evaluate the current status of soil and groundwater impacts associated with the identified on-site RECs. The scope of work is not intended to provide complete delineation or develop corrective action costs.

1.2 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time. Terracon makes no warranties, either expressed or implied, regarding the findings, conclusions, or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report. These investigation services were performed in accordance with the scope of work agreed with you, our client, as reflected in our proposal and were not restricted by ASTM E1903-11.

1.3 Additional Scope Limitations

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-site activities and other services, including file reviews, performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, not detected or not present during these assessment activities; thus, we cannot represent that the site is free of hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this investigation. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

1.4 Reliance

This report has been prepared for the exclusive use of North Carolina Department of Administration – State Property Office. Any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of Wake County and Terracon. Any unauthorized distribution or reuse is at Wake County’s sole risk. Reliance by authorized parties will be subject to the terms, conditions, and limitations stated in Terracon’s Proposal No. P70167318, dated June 10, 2016. The limitation of liability defined in the terms and conditions is the aggregate limit of Terracon’s liability to the client and all relying parties unless otherwise agreed in writing.

2.0 FIELD INVESTIGATION METHODS

Field activities were conducted on August 11 and August 12, 2016. Activities included boring layout, a request for public utility locating by *North Carolina 811*, private utility location, advancement of soil borings, installation of temporary groundwater monitoring wells, and sampling of soil and groundwater.

2.1 Private Utility Location

A ground penetrating radar and electromagnetic (GPR/EM) survey was conducted in the vicinity of the former UST to verify the location of the UST basin and around the building to mark utilities in boring locations. Due to interference from multiple utilities in the vicinity, the extent of the former UST basin could not be located.

2.2 Soil Borings

Terracon advanced one boring for the purpose of soil sampling in the vicinity of the former UST. Soil borings could not be safely advanced in the vicinity of the former UST basin due to a high density of subsurface utilities in that area. Terracon also advanced five borings for temporary monitoring well installation around the site building. Borings were advanced via direct push technology (DPT) drilling techniques via a truck-mounted 5410 Geoprobe drill rig. The borings were completed to depths ranging from 19 to 44 feet below land surface (ft bls). Soils were collected from the borings via the hand auger bucket or Macro-Core® samplers. Soil characteristics including soil type, color, moisture, and odor were observed in the field and recorded on boring logs.

Soils encountered in the borings were generally characterized as interbedded light brown and orangish-yellow sandy clays, clays, and micaceous clayey sands. Petroleum odors were noted in boring SB-01 at 12 ft bls and deeper. The soils were screened in the field for the presence of organic vapors by placing each sample into a dedicated, re-sealable plastic bag and inserting the

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tip of a photoionization detector (PID) into the headspace of the bag. Soil boring logs are included in **Appendix A**. The soil boring location is depicted on **Exhibit 3**.

Soil cuttings were containerized in a 55-gallon drum on-site pending analytical results. Non-dedicated sampling equipment was decontaminated using a Liquinox®/water wash followed by a distilled water rinse prior to use and between borings.

2.3 Soil Sampling

Two soil samples from SB-01 were selected for laboratory analysis based on PID results and depth of highest potential for impact above the water table. The two samples were collected from a boring located adjacent to the former UST basin. The soil samples were packed in laboratory-supplied sample containers. The sample containers were packed in ice and retrieved by a Con-Test Analytical Laboratory (Con-Test) courier for analysis of volatile organic compounds (VOCs) by EPA Method 8260 and volatile petroleum hydrocarbons (VPH) according to the Massachusetts Department of Environmental Protection (MADEP).

2.4 Temporary Monitoring Well Installation

Temporary monitoring wells TW-01 through TW-05 were installed on August 11, 2016. The monitoring wells were installed along the northern and eastern edges of the buildings to evaluate potential impacts from on-site printing operations. Terracon oversaw the construction of the temporary groundwater monitoring wells within these boreholes. The wells were constructed as follows:

- n Installation of a 10-foot section of 1-inch diameter, 0.010-inch machine slotted PVC well screen;
- n Installation of a 1-inch diameter, threaded, flush-joint PVC riser pipe to the ground surface; and
- n Placement of sand in the borehole annulus to two feet above the screened interval followed by a layer of hydrated bentonite to the surface to seal the well.

Well construction details are included in **Table 1**. Drilling equipment was thoroughly decontaminated prior to use and between each temporary monitoring well.

2.5 Temporary Monitoring Well Sampling

Temporary wells TW-01 through TW-05 were sampled on August 11, 2016. Prior to sampling, depth to groundwater measurements were collected from each well. Depth to groundwater measurements ranged from approximately 22 to 40 ft bls (**Table 1**).

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Each temporary monitoring well was purged with a peristaltic pump using low flow sampling techniques (i.e., <200 milliliters per minute) prior to sampling. A groundwater sample was collected directly into laboratory supplied containers at low flow sampling rates. The following parameters were measured during purging: pH, temperature, oxidation reduction potential (ORP), dissolved oxygen (DO), and conductivity. The groundwater samples were packed in ice and retrieved by a Con-Test courier for analysis of VOCs by EPA Method 8260.

Sampling equipment was thoroughly decontaminated with a Liquinox®/distilled water wash prior to sample collection, and between sampling. After completion of sampling activities, the temporary monitoring wells were abandoned on August 11, 2016. The temporary well casings were removed from the ground and the borings were filled with hydrated bentonite chips to the surface.

2.6 Monitoring Well Sampling

Groundwater samples were collected from 6 existing groundwater monitoring wells (DW-1, RW-1 SW-2, SW-A, SW-B, and SW-C). Terracon was not able to locate construction information for three of the monitoring wells and the wells did not have well tags; therefore, they were assigned well identifications "SW-A", "SW-B", and "SW-C". RW-1 is a four-inch diameter recovery well. Monitoring well MW-1, reportedly installed in the former UST basin, was not located. Depth to water was gauged in the monitoring wells prior to purging. Depth to groundwater measurements were converted to water level elevations using top of casing survey data for the permanent monitoring and recovery wells. Construction details and elevation data for the monitoring wells is included on **Table 1**.

Monitoring wells were purged with a peristaltic pump or submersible pump using low flow sampling techniques (i.e., <200 milliliters per minute) prior to sampling. Field parameters (temperature, pH, specific conductance, DO, and ORP) were measured to ensure collection of a sample representative of formation water. Following stabilization of pH and conductivity, groundwater sample was collected from each monitoring well directly into laboratory supplied containers at low flow sampling rates. Samples from permanent monitoring wells were analyzed for VOCs via EPA Method 8260 and MADEP VPH.

3.0 FIELD INVESTIGATION RESULTS

3.1 Soil Analytical Results

Results were compared to the soil to groundwater MSCCs, residential MSCCs, and industrial/commercial MSCCs.

- n Seven VOC constituents were detected at concentrations above the laboratory reporting limits in the soil sample collected from boring SB-01 at a depth of 10 to 12 ft bls. The seven

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- constituents were detected at concentrations above their respective soil-to-groundwater MSCCs and below residential and industrial/commercial MSCCs.
- n Twelve VOC constituents were detected at concentrations above the laboratory reporting limits in soil sample collected from boring SB-01 at a depth of 16 to 18 ft bls. Twelve of the constituents were detected at concentrations above their respective soil-to-groundwater MSCCs and below residential and industrial/commercial MSCCs.
- n One petroleum carbon fraction class (C9-C18 aromatics) was detected in SB-01 (10-12) and SB-01 (16-18) at concentrations above its respective soil-to-groundwater and residential MSCCs.

A summary of the constituents detected in soils is included on **Table 2**. A copy of the laboratory report is provided in **Appendix B**.

3.2 Groundwater Analytical Results

Groundwater sample results were compared to the NCAC 2L Groundwater Quality Standards (2L Standards) and Division of Waste Management (DWM) Vapor Intrusion Residential and Non-Residential Groundwater Screening Levels (VI-GWSLs). Based on groundwater elevation in permanent wells, groundwater flow is estimated toward the north.

- n Six VOC constituents (bromodichloromethane, ethylbenzene, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and total xylenes) and one petroleum fraction class (C5-C8 aliphatics) were detected at concentrations above their respective 2L standards in recovery well RW-1 or monitoring well SW-2.
- n Four VOC constituents (ethylbenzene, naphthalene, 1,2,4-trimethylbenzene, and total xylenes) were detected at concentrations above their respective residential and non-residential VI-GWSLs in recovery well RW-1. Seven detected constituents do not have VI-GWSLs.
- n Tetrachloroethene was detected at estimated concentrations above the method detection limit and below the laboratory reporting limit in temporary monitoring wells TW-02 and TW-04. The concentration in TW-04 is above the 2L standard; however, since the concentration is below the reporting limit it therefore does not constitute a violation of the 2L standard.
- n VOCs were not detected above method detection limits in DW-1, SW-A, SW-B, SW-C, TW-01, and TW-05.

A summary of the constituents detected in groundwater is included as **Table 3**.

4.0 SUMMARY AND CONCLUSIONS

- n Soils encountered in the borings were generally characterized as interbedded light brown and orangish-yellow sandy clays, clays, and micaceous clayey sands. DPT refusal was not encountered.
- n Groundwater was encountered at depths ranging from approximately 22 to 40 ft bls.
- n Laboratory analytical data indicates the presence of petroleum compounds above soil-to-groundwater and residential standards in soil adjacent to the former UST location. With the existing building in-place, it would be difficult to safely excavate the impacted soil.
- n Compounds detected are generally consistent with those expected from a release of gasoline and were detected above 2L Standards in a groundwater sample collected in the vicinity of the suspected former UST basin.
- n The open LUST incident #26194 could likely be closed with a groundwater use restriction and residential use restriction recorded on the deed if the petroleum-impacted soil remain in-place. If redevelopment plans for the site include demolition of the building, the impacted soil could be excavated and the incident could be closed without a residential use restriction, although a groundwater use restriction would still be required due to groundwater concentrations above 2L standards. Closure would be dependent upon NCDEQ's concurrence that groundwater impacts do not pose a concern to the adjacent stream.
- n Due to depths to groundwater greater than approximately 20 feet below the building, which exceeds the EPA's vertical screening distance of 6 feet for dissolved phase plumes (EPA, 2015), and the lack of precluding factors, investigation for petroleum vapor intrusion is not warranted at this time.
- n Tetrachloroethane, the chlorinated solvent detected in groundwater on-site in 2004 and 2005, was not detected during this assessment; however, PCE, a chlorinated solvent and non-petroleum related compound, was detected in TW-02 at a concentration below its 2L standard and in TW-04 at an estimated concentration above its 2L standard. It is not considered a violation to the 2L standard because the concentration was estimated (i.e. contained a "J"-flag data qualifier).

5.0 RECOMMENDATIONS

Based on the results of this LSI, Terracon has the following recommendation for the site.

- n The property owner should submit the 2L standard exceedances for Tetrachloroethane and PCE to NCDEQ's Inactive Hazardous Sites Branch (IHSB).
- n Due to the current soil and groundwater concentrations around the former gasoline UST (Incident #26194), the site is not currently eligible for an unrestricted use closure. The site can likely be closed under its current conditions with a residential use restriction and a groundwater use restriction. If site conditions change to allow excavation of impacted soil in the vicinity of the UST (i.e. the building is demolished), the site can likely be closed to allow

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for future residential use following excavation activities, although a groundwater use restriction on the deed would still be required. Closure would be dependent upon NCDEQ's concurrence that groundwater impacts do not pose a concern to the adjacent stream.

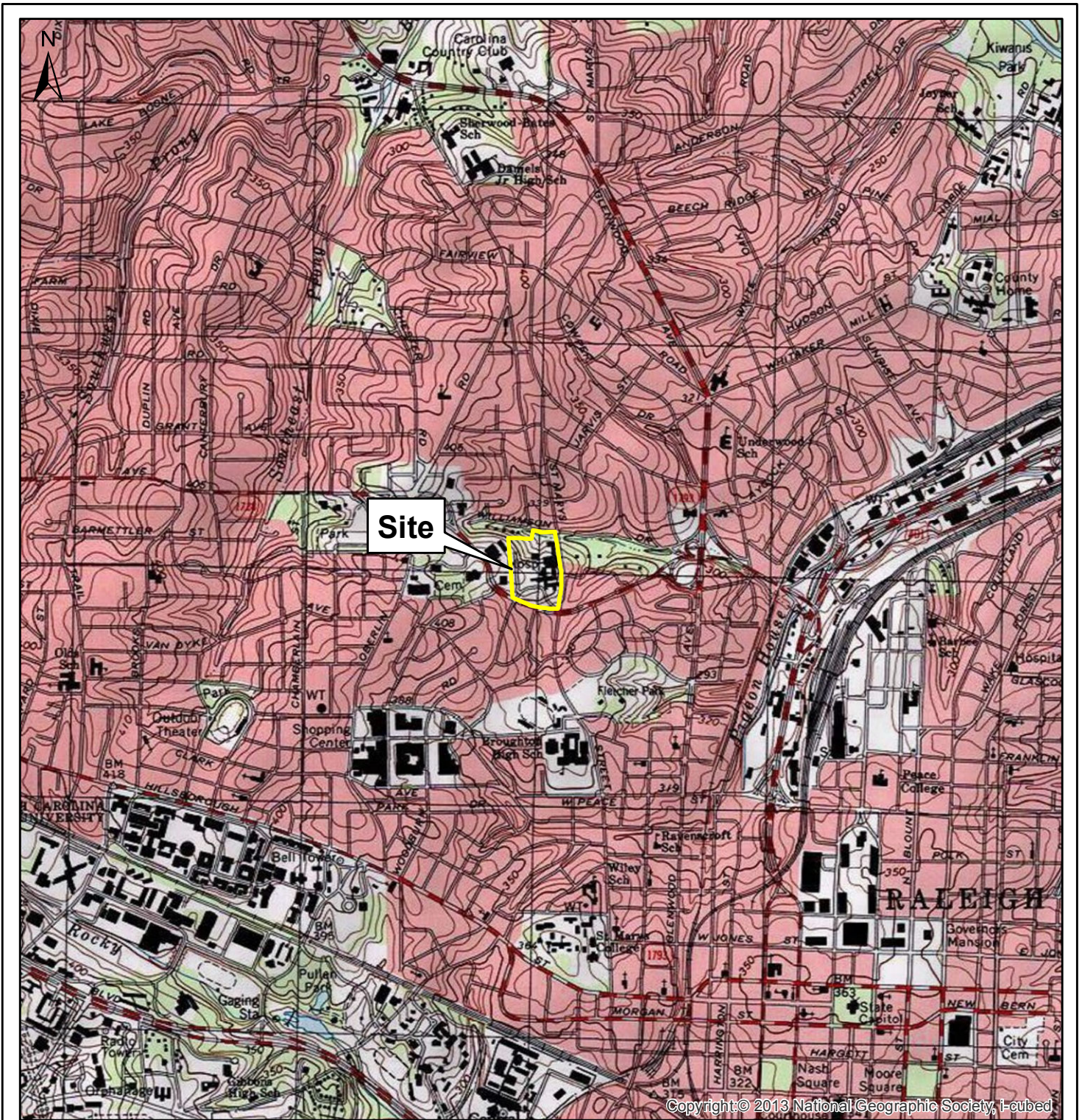
6.0 REFERENCES

EEC, Inc., 2004. Comprehensive Site Assessment Report: Employment Security Commission of North Carolina. GW Incident #: 26194, dated April 27, 2004.

EPA, 2015. Technical Guide for Addressing Petroleum Vapor Intrusion at Leaking Underground Storage Tank Site. US Environmental Protection Agency. June 2015.

Terracon, 2015. Phase I Environmental Site Assessment: North Carolina Employment Security Commission Property, Raleigh, Wake County, North Carolina. Terracon Project No. 70167125, dated April 15, 2016.

FIGURES



USGS TOPOGRAPHIC MAP
 RALEIGH WEST, NC QUADRANGLE
 1993

PM: JLF
 Drawn By: CMP
 Checked By: JLF
 Approved By: MTJ

Project No. 70167373
 Scale: 1:24,000
 File Path:
 Date: 9/13/2016

Terracon

2401 Brentwood Drive, Suite 107 Raleigh, NC 27604
 Phone: (919) 873-2211 Fax: (919) 873-9555

Topographic Vicinity Map

NC Employment Security Commission Property
700 Wade Avenue
Raleigh, Wake County, North Carolina

EXHIBIT NO. 1



PM:	JLF	Project No.	70167318
Drawn By:	DWM	Scale:	1 in = 83,333 ft
Checked By:	JLF	File Path:	70167318
Approved By:	JLF	Date:	August 2016

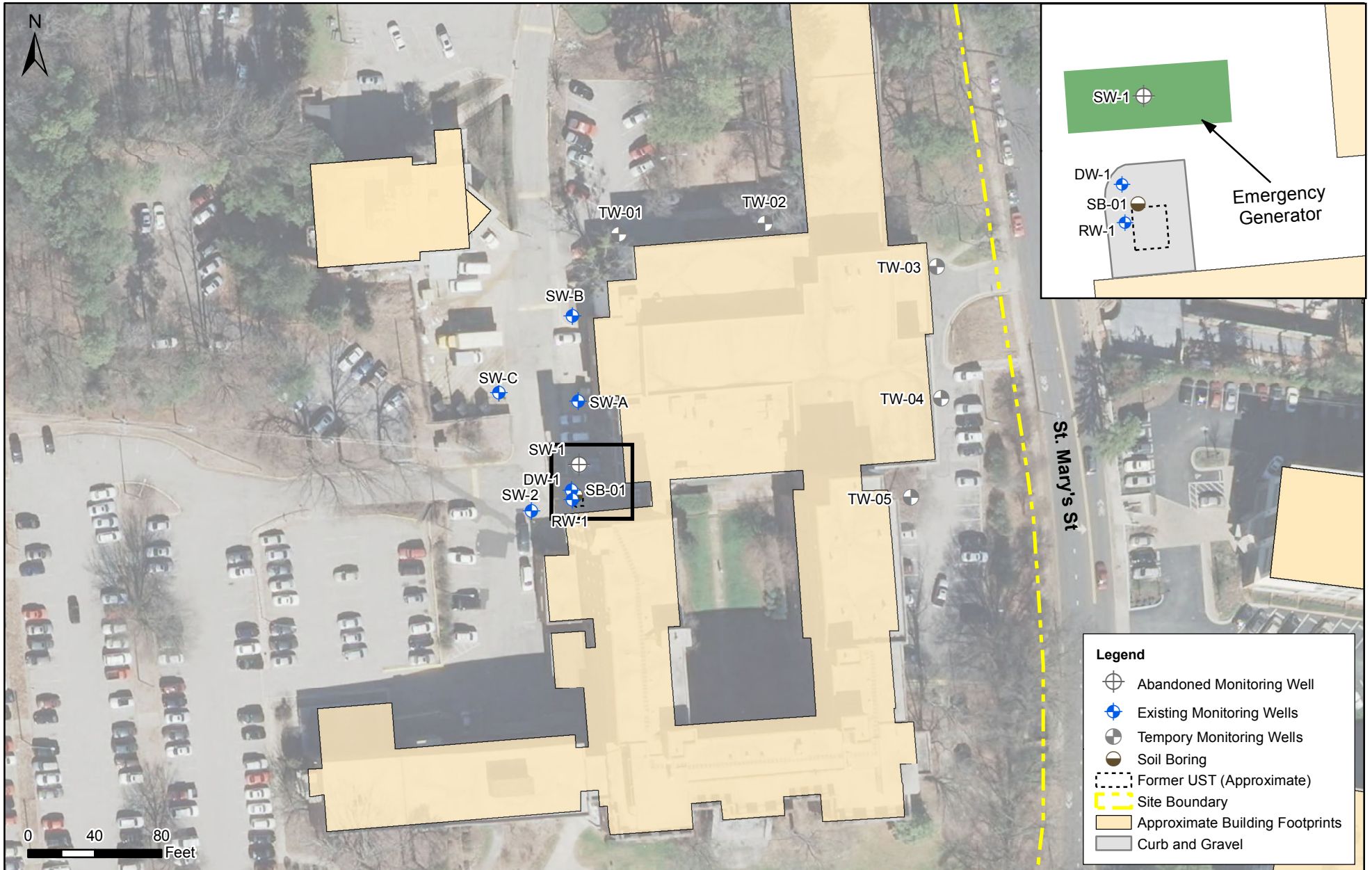
Terracon

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Site Location Map

NC Employment Security Commission Property
700 Wade Avenue
Raleigh, Wake County, North Carolina

EXHIBIT NO.
2



PM: JLF
 Drawn By: DWM
 Checked By: JLF
 Approved By: JLF

Project No. 70167318
 Scale: 1 in = 80 ft
 File Path:
 Date: August 2016

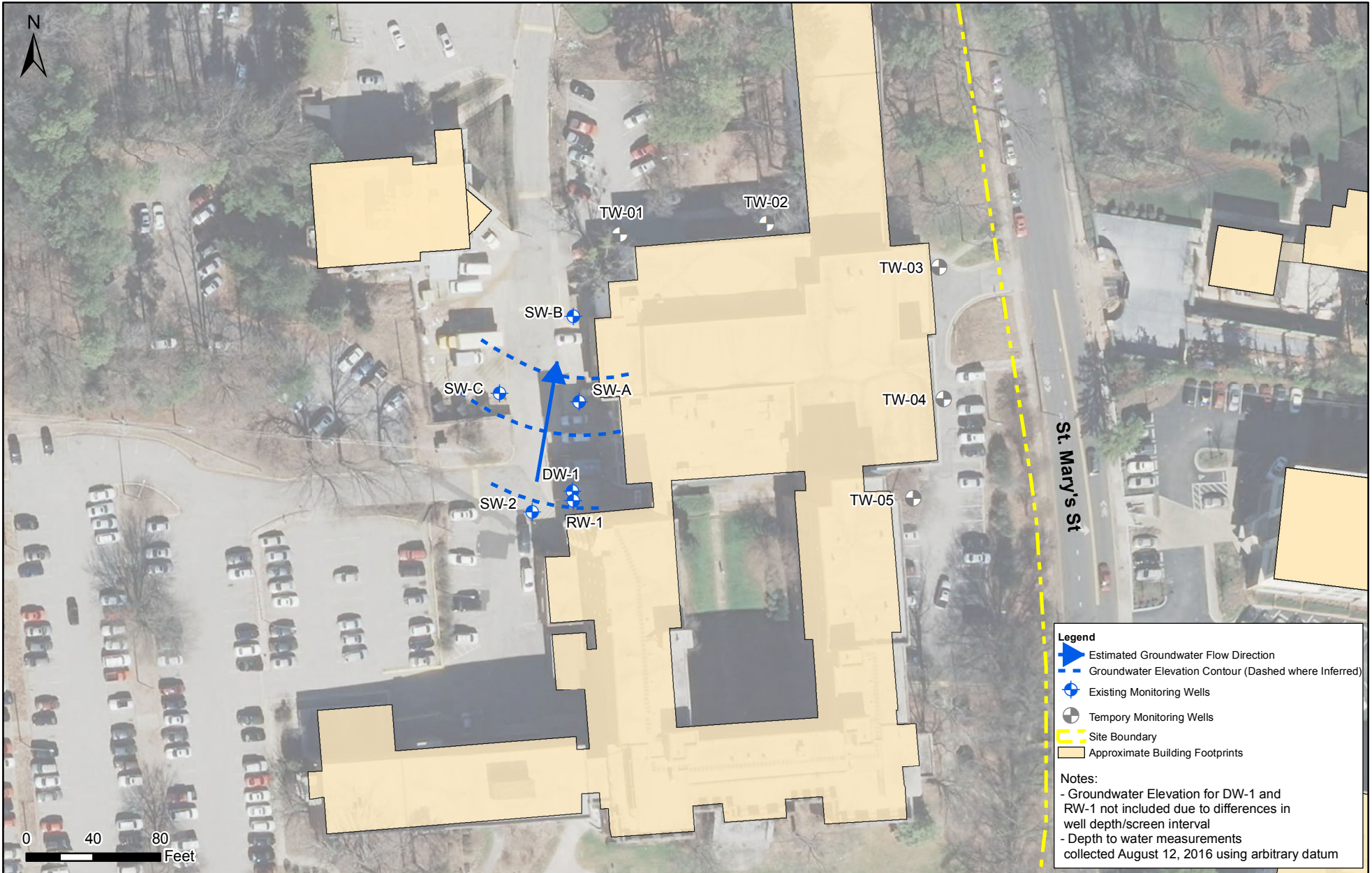
Terracon

2401 Brentwood Road, Suite 107 Raleigh, NC 27604
 Phone: (919) 873-2211 Fax: (919) 873-9555

Sample Location Map

**NC Employment Security Commission Property
 700 Wade Avenue
 Raleigh, Wake County, North Carolina**

EXHIBIT NO. 3



Legend

- Estimated Groundwater Flow Direction
- Groundwater Elevation Contour (Dashed where Inferred)
- Existing Monitoring Wells
- Temporary Monitoring Wells
- Site Boundary
- Approximate Building Footprints

Notes:

- Groundwater Elevation for DW-1 and RW-1 not included due to differences in well depth/screen interval
- Depth to water measurements collected August 12, 2016 using arbitrary datum

PM:	JLF	Project No.	70167318
Drawn By:	DWM	Scale:	1 in = 80 ft
Checked By:	JLF	File Path:	
Approved By:	JLF	Date:	August 2016

Terracon

2401 Brentwood Road, Suite 107 Raleigh, NC 27604
 Phone: (919) 873-2211 Fax: (919) 873-9555

Groundwater Elevation Map

**NC Employment Security Commission Property
 700 Wade Avenue
 Raleigh, Wake County, North Carolina**

EXHIBIT NO.
4

TABLES

Table 1
Monitoring Well Construction Details and Depth to Groundwater Measurements
Limited Site Investigation
North Carolina Employment Security Commission
700 Wade Avenue
Raleigh, Wake County, North Carolina
Terracon Project No. 70167318

Well ID	Date Installed	Date Water Level Measured	Well Casing Depth (ft. BGS)	Screened Interval (x to y ft. BGS)	Bottom of Well (ft. BGS)	Top of Casing Elevation (ft)	Depth to Water from Top of Casing (ft.)	Groundwater Elevation (ft)	Comments
DW-1	9/9-10/03	08/12/16	50	45-50	50	95.31	26.98	68.33	Permanent Monitoring Well
RW-1	NA	08/12/16	NA	NA	34	94.16	27.49	66.67	
SW-2	09/09/03	08/12/16	35	25-35	35	97.23	28.12	69.11	
SW-A	NA	08/12/16	NA	NA	29	91.46	24.22	67.24	
SW-B	NA	08/12/16	NA	NA	25	90.71	24.19	66.52	
SW-C	NA	08/12/16	NA	NA	26	92.06	24.33	67.73	
TW-01	08/11/16	08/11/16	28	18-28	28	--	22.37	--	Temporary Monitoring Well
TW-02	08/11/16	08/11/16	30	20-30	30	--	25.80	--	
TW-03	08/11/16	08/11/16	32	22-32	32	--	28.25	--	
TW-04	08/11/16	08/11/16	39	29-39	39	--	35.83	--	
TW-05	08/11/16	08/11/16	43	33-43	43	--	39.94	--	

Notes:

"--" Indicates not surveyed

NA - Information Not available

BGS - Below ground surface

Ft. - Feet

Temporary monitoring wells abandoned on 8/11/16

Corner of concrete stair support was used as an arbitrary benchmark with an elevation of 100 ft (EEC, Inc, 2004)

Wells SW-A, SW-B, and SW-C were assigned well identifications since they did not have ID tags and information regarding construction was not located

Table 2
 Summary of Soil Analytical Results
 Limited Site Investigation
 North Carolina Employment Security Commission
 700 Wade Avenue
 Raleigh, Wake County, North Carolina
 Terracon Project No. 70167318

Sample ID:	SB-01 (16-18)	SB-01 (10-12)	Soil-to-Groundwater MSCC	Residential MSCC	Industrial/Commercial MSCC
Sample Collection Date:	8/11/2016	8/11/2016			
Sample Depth (ft bls):	16-18	10-12			
Volatile Organic Compounds (EPA Method 8260)					
n-Butylbenzene	51	32	4.3	626	16,350
sec-Butylbenzene	16	8.2	3.3	626	16,350
tert-Butylbenzene	0.7 J	0.69 J	3.4	626	16,350
Ethylbenzene	11	<3.5	4.9	1,560	40,000
Isopropylbenzene (Cumene)	15	0.79 J	1.7	1,564	40,880
p-Isopropyltoluene	11	8.7	0.12	100	4,000
Naphthalene	130	31	0.16	313	8,176
n-Propylbenzene	39	1.6 J	1.7	626	16,350
Toluene	1.5 J	<3.5	4.3	1,200	32,000
1,2,4-Trimethylbenzene	670	160	8.5	782	20,440
1,3,5-Trimethylbenzene	310	220	8.3	782	20,440
Xylenes (Total)	450	4.9 J	4.6	3,129	81,760
Bromoform	<6.9 L-04,V-05	<6.9 L-04, V-05	0.026	81	724
tert-Butylbenzene	0.69J	0.69 J	3.4	626	16,350
1,2-Dibromo-3-chloropropane (DBCP)	<.17L-04,V-05	<17L-04,V-05	NE	NE	NE
1,4-Dioxane	<150V-05	<170V-05	NE	NE	NE
m+p Xylene	300	3.0 J	4.6	3,129	81,760
o-Xylene	150	1.9 J	4.6	3,129	81,760
MADEP-VPH					
Aromatics, C9-C18	4,900	3,900	540	1,500	40,000

Notes:

Compounds detected in one or more sample are shown in the table
 Results and standards shown are in milligrams per kilogram (mg/kg)

NE: Not established

J: estimated concentration above the laboratory method detection limit and below the laboratory reporting limit

<: Compound was not detected at a concentration above the laboratory reporting limit

ft bls - feet below land surface

MSCC: NCDEQ Soil-to-Groundwater Maximum Soil Contaminant Concentration

Light grey shading indicates concentrations exceed soil-to-groundwater MSCCs

Medium grey shading indicates concentrations exceed soil-to-groundwater and residential MSCCs

MADEP VPH: Massachusetts Department of Environmental Protection Volatile Petroleum Hydrocarbons

L-04: Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits.

Reported value for this compound is likely to be biased to the low side.

V-05: Continuing calibration did not meet method specifications and was biased on the low side for this compound.

Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

Table 3
 Summary of Groundwater Analytical Results
 Limited Site Investigation
 North Carolina Employment Security Commission
 700 Wade Avenue
 Raleigh, Wake County, North Carolina
 Terracon Project No. 70167318

Sample ID:	DW-1	RW-1	SW-2	SW-A	SW-B	SW-C	TW-01	TW-02	TW-03	TW-04	TW-05	2L Standard	Residential VI GWSL	Non- Residential VI GWSL
Screen Interval (ft bls):	45-50	20-40	25-35	NA	NA	NA	18-28	20-30	22-32	29-39	33-43			
Sample Collection Date:	8/12/2016	8/12/2016	8/12/2016	8/12/2016	8/12/2016	8/12/2016	8/11/2016	8/11/2016	8/11/2016	8/11/2016	8/11/2016			
Volatile Organic Compounds (EPA Method 8260)														
Bromodichloromethane	<0.50	<25	1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.6	8.76	38.2
tert-Butyl Alcohol (TBA)	<20	2,200	<20	<20	<20	<20	<20	5.5J	<20	<20	<20	NE	NE	NE
n-Butylbenzene	<1.0	13J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	70	NE	NE
Ethylbenzene	<1.0	87	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	600	34.9	152
Isopropylbenzene (Cumene)	<1.0	12J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	70	177	745
p-Isopropyltoluene (p-Cymene)	<1.0	9.5J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NE	NE	NE
Naphthalene	<2.0	420	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	6	34.8	146
n-Propylbenzene	<1.0	12J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	70	486	2,040
Toluene	<1.0	86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	600	3,840	16,100
Trichlorofluoromethane (Freon 11)	<2.0	<100	0.65J	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2,000	NE	NE
1,2,4-Trimethylbenzene	<1.0	2,400	0.22J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	400	5.8	24.4
1,3,5-Trimethylbenzene	<1.0	910	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	400	NE	NE
Xylenes (Total)	<2.0	5,500	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	500	76.9	414
Dichlorodifluoromethane (Freon 12)	<2.0 L-04	<2.0 L-04	<2.0 L-04	<2.0 L-04	<2.0 L-04	<2.0 L-04	<2.0 L-04	<2.0 L-04	<2.0 L-04	<2.0 L-04	<2.0 L-04	1,000	1.49	6.25
Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.36J	<1.0	0.79J	<1.0	0.7	11.5	48.4
Chloroform	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	0.49J	0.45J	<2.0	70	8.14	35.5
Methyl tert-Butyl Ether (MTBE)	<1.0	<1.0	0.11J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.85J	<1.0	20	4,500	19,700
MADEP-VPH														
Aliphatics, C5-C8	<100	2,300	<100	<100	<100	<100	--	--	--	--	--	400	NE	NE
Aromatics, C9-C18	<100	7,600	<100	<100	<100	<100	--	--	--	--	--	10,000	NE	NE

Notes:
 Detected compounds are shown in the table
 Concentrations are reported in micrograms per liter (µg/L)
 2L Standard - North Carolina Administrative Code 2L Groundwater Quality Standards (GWQS) (April 2013)
 Non-Residential VI GWSL - NCDEQ Division of Waste Management Non-Residential Vapor Intrusion Groundwater Screening Levels (March 2016)
 ft bls - feet below land surface
 NE - Not Established
 Light grey shading indicates a concentration above its applicable 2L Standard
 Dark shading indicates a concentration above its respective Residential VI GWSL
 Dark shading indicates a concentration above its respective 2L Standard, Residential VI GWSL, and Non-Residential VI GWSL
 -- : not analyzed
 < - Compound was not detected at a concentration above the laboratory reporting limit
 J: Indicates estimated concentration less than the reporting limit and above the method detection limit

APPENDIX A

SOIL BORING LOGS

Lithology Log



Boring ID: TW-01

Project Number: 70167318		Start Date/Time: 8/11/16 0830		Sample Method	Drilling Method		
Site Location: Raleigh, NC		End Date/Time: 8/11/16 0910		<input type="checkbox"/> Hand Auger	<input checked="" type="checkbox"/> DPT		
Weather: 90s°F, sunny		Boring Diameter: 2"		<input checked="" type="checkbox"/> Macro-Core	<input type="checkbox"/> HSA		
Logged By: CMP		Total Depth: 28'		<input type="checkbox"/> Split Spoon	<input type="checkbox"/> Mud Rotary		
Drilling Sub: Regional Probing		Water Level:		<input type="checkbox"/> Shelby Tube	<input type="checkbox"/> Air Rotary		
Drill Rig: Geoprobe 5410		Well Installed: TEMP Type II			<input type="checkbox"/> Rock Core		
Depth (ft bls)	Recovery (inches)	Blow Counts (n)	PID (ppm)/ppb	U.S.C.S.	(Depth interval) Color, MAIN COMPONENT, minor component(s), structure, moisture, angularity, odor, staining	Lab Sample: ID, analysis, time	Drilling method, tooling, depth
0-4	CMP to 28" ~48"	NA	>0.1	CL	(0-4') ^{CMP} red to light brown, sandy to red-brown CLAY, mica-rich ~3" asphalt on top	NA	Hand Auger
4-8	~28"		>0.1		(4-8) " " moist at ~8ft		DPT ^{CMP} DPT 4ft x 2"
8-12	~38"		>0.1	ML	(8'- ^{11.8'} 9.8') light brown SILT very mica rich		
12-16	~48"		>0.1	SM SP ^{CMP}	(^{11.8'} 9.8' - ^{16'} 12') tan SAND, fine grained dry, some saprolite texture very little mica		
16-20	~40"		>0.1		(12-16') " " saprolite texture, some black manganese nodules slightly moist at 20'		
20-24	~42"		>0.1		(16-18') (20'-24') - driller noted getting harder to wet tan SAND, moist, saprolite more manganese staining ~22ft		
24-28	NA		NA		23.5' - transition to light gray + tan sandy, saprolite mica-rich (24'-28') - did not collect soils		
					Boring terminated @ 28ft to set temp well screen 18'-28' - sand 16'-28' - bentonite 14'-16'	wet, gray + tan sandy Saprolite (plagioclase + biotite rich) some PWR at bottom	

Notes: PID screened at two locations within each 4ft interval (screened on 2ft intervals)
Estimate DTW ~ 21-22 ft bls

ppm: parts per million

ppb: parts per billion

NA= Not applicable

bls = below land surface

Lithology Log



Boring ID: TW-02

Project Number: 70167318		Start Date/Time: 8/11/16 10:10		Sample Method	Drilling Method		
Site Location: Raleigh, NC		End Date/Time: 8/11/16 10:50		<input type="checkbox"/> Hand Auger	<input checked="" type="checkbox"/> DPT		
Weather: 90s°F sunny		Boring Diameter: 2"		<input checked="" type="checkbox"/> Macro-Core	<input type="checkbox"/> HSA		
Logged By: CMP		Total Depth: 30'		<input type="checkbox"/> Split Spoon	<input type="checkbox"/> Mud Rotary		
Drilling Sub: Regional Probing		Water Level:		<input type="checkbox"/> Shelby Tube	<input type="checkbox"/> Air Rotary		
Drill Rig: Geoprobe 5410		Well Installed: temp type #			<input type="checkbox"/> Rock Core		
Depth (ft bls)	Recovery (inches)	Blow Counts (n)	PID (ppm, ppb)	U.S.C.S	(Depth interval) Color, MAIN COMPONENT, minor component(s), structure, moisture, angularity, odor, staining	Lab Sample: ID, analysis, time	Drilling method, tooling, depth
0-4	~28"	NA	0.5 ppm 0.1 ppb	CL	(0'-4') - light brown to red-brown sandy CLAY, mica-rich dry	NA	DPT 4ft x 2" macro core
4-8	~48"	NA	>0.1		(4'-8') " " slightly more silty		
8-12	~48"	NA	>0.1	ML	(8'-12') light brown SILT w/some clay very mica-rich, dry		
12-16	~48"	NA	>0.1		(12'-16') light brown mica-rich SILT slightly moist		
16-20	42"	NA	>0.1	SM	(16'-20') " " w/some fine sand moist and saprolite texture ~19.5 ft		
20-24	44"	NA	>0.1		(18'-20') " " coarse sand layer ~21.5-22' moist to wet		
24-28	48"	NA	>0.1		19.5-20' amp 811 23.5'-24' - transition to grey-brown and tan mica-rich saprolite sandy SILT		
28-30	48"	NA	>0.1		(24'-28') grey-brown and tan saprolite sandy SILT, wet		
					Boring terminated @ 30ft bls to set 1" temp well • screen 20'-30' • sand 18'-30' • bentonite		

Notes:

Lithology Log



Boring ID: TW-03

Project Number: 70167318		Start Date/Time: 8/11/16 11:55		Sample Method	Drilling Method		
Site Location: Raleigh, NC		End Date/Time: 8/11/16 12:35		<input type="checkbox"/> Hand Auger	<input checked="" type="checkbox"/> DPT		
Weather: 70°F		Boring Diameter: 3"		<input checked="" type="checkbox"/> Macro-Core	<input type="checkbox"/> HSA		
Logged By:		Total Depth: 32'		<input type="checkbox"/> Split Spoon	<input type="checkbox"/> Mud Rotary		
Drilling Sub: Regional Probing		Water Level:		<input type="checkbox"/> Shelby Tube	<input type="checkbox"/> Air Rotary		
Drill Rig: Geoprobe 5410		Well Installed: Temp Type II			<input type="checkbox"/> Rock Core		
Depth (ft bls)	Recovery (inches)	Blow Counts (n)	PID (ppm/ppb)	U.S.C.S.	(Depth interval) Color, MAIN COMPONENT, minor component(s), structure, moisture, angularity, odor, staining	Lab Sample: ID, analysis, time	Drilling method, tooling, depth
0-4	46"	NA	*0.1	CL	(0-4) red-brown silty CLAY, some apparent quartz gravel at 4ft bls	NA	DPT 4ft x 2" macrocore
4-8	~48"	NA	*0.1	↓	(4-8) " " , slightly more mica-rich	↓	↓
8-12	~48"	NA	*0.1		(8-12) " " : more silty + mica rich		
12-16	~48"	NA	*0.1		ML (9-12') light brown SILT w/some very fine sand, very mica-rich		
16-20	~48"	NA	*0.1	↓	(12-16) " " light brown to tan slightly moist		
20-24	~48"	NA	*0.1	SM/ML (16-20) " " sandier			
24-28	~48"	NA	*0.1	SM/ML (20-24) " " some dark brown iron or manganese streaks, moist to wet			
28-32	~48"	NA	*0.1	↓	(24-28) " " wet, more black streaks some saprolite texture		
					(28-32) " " wet		
					Boring terminated @ 32ft bls to set temp well (2")		
					• screen 22-32'		
					• sand 20-32'		
					• bentonite 20'-0'		

Notes: * should be 20.1 (not greater than) for all PID readings

Lithology Log



Boring ID: TW-04

Project Number: 70167318	Start Date/Time: 1310 8/11/16	Sample Method	Drilling Method
Site Location: Raleigh, NC	End Date/Time:	<input type="checkbox"/> Hand Auger	<input checked="" type="checkbox"/> DPT
Weather: Sunny 90s	Boring Diameter: 2"	<input checked="" type="checkbox"/> Macro-Core	<input type="checkbox"/> HSA
Logged By: DW/WH	Total Depth:	<input type="checkbox"/> Split Spoon	<input type="checkbox"/> Mud Rotary
Drilling Sub: Regional Probing	Water Level:	<input type="checkbox"/> Shelby Tube	<input type="checkbox"/> Air Rotary
Drill Rig: Geoprobe 5410	Well Installed: Temp Type FF		<input type="checkbox"/> Rock Core

Depth (ft bls)	Recovery (inches)	Blow Counts (n)	PID ppm/ppb	U.S.C.S	(Depth interval) Color, MAIN COMPONENT, minor component(s), structure, moisture, angularity, odor, staining	Lab Sample: ID, analysis, time	Drilling method, tooling, depth
0-4	~45	NA	LO.1	CL	(0-2.5) red-brown silty CLAY, mica-rich. Asphalt from 0"-4"	NA	DPT 4ft x 2" macrocore
				SM	(2.5-3.5) red-brown to grey silty SAND		
4-8	36	NA	LO.1	CL	(4-8) red-brown silty CLAY, mica-rich		
8-12	40	NA	LO.1	ML	(8-12) Light brown SILT, very mica-rich		
12-16	46	NA	LO.1	SM	(12-16) Light brown mica-rich SILT		
16-20	48	NA	LO.1		(16-20) " " sandier		
20-24	48	NA	LO.1		(20-24) " " w/ black streaking (manganese)		
24-28	48	NA	LO.1		(24-28) " " w/ black manganese streaking, moist		
28-32	48	NA	LO.1		(28-32) " " saponite texture, moist		
32-36	48	NA	LO.1	(32-36) " " slightly darker brown SILT, mica-rich			
36-40	48	NA	LO.1	(36-40) moist, saponite texture, same as above			
					Boring terminated @ 40' bls to set up 1" temp well • screen 29'-39' • sand 27'-29' • bentonite		
					Boring terminated @ 40ft bls		

Notes:

screen 29-39

ppm: parts per million

ppb: parts per billion

NA= Not applicable

bls = below land surface

Lithology Log



Boring ID: TW-05

Project Number: 70167318		Start Date/Time: 8/11/16 15:00		Sample Method	Drilling Method		
Site Location: Raleigh, NC		End Date/Time: 8/11/16 16:10		<input type="checkbox"/> Hand Auger	<input checked="" type="checkbox"/> DPT		
Weather: 90s° F, sunny		Boring Diameter: 2"		<input checked="" type="checkbox"/> Macro-Core	<input type="checkbox"/> HSA		
Logged By: CMP		Total Depth: 44'		<input type="checkbox"/> Split Spoon	<input type="checkbox"/> Mud Rotary		
Drilling Sub: Regional Probing		Water Level:		<input type="checkbox"/> Shelby Tube	<input type="checkbox"/> Air Rotary		
Drill Rig: Geoprobe 5410		Well Installed: Temp type II			<input type="checkbox"/> Rock Core		
Depth (ft-bls)	Recovery (inches)	Blow Counts (n)	PID (ppm) (ppb)	U.S.C.S	(Depth interval) Color, MAIN COMPONENT, minor component(s), structure, moisture, angularity, odor, staining	Lab Sample: ID, analysis, time	Drilling method, tooling, depth
0-4	38"	NA	<0.1	CL	top soil followed by red-brown CLAY, sandy, dry	NA	DP4 4ft x 2" macro core
4-8	42"	NA	<0.1	↓	(4-8) " " more mica rich		
8-10	44"	NA	<0.1		ML		
10-12	46"	NA	<0.1	SM/ML	(11.5-16) light brown to tan silty super fine SAND		
16-20	48"	NA	<0.1		(16-20) " "		
20-24	42"	NA	<0.1		(20-24) " "		
24-28			<0.1		(24-28) " "		
28-32			<0.1		(28-32) " " ~30ft -> slightly darker brown color		
32-36			<0.1		(32-36) " "		
36-40			<0.1	SP	(36-40) very hard, slow drilling (35.5-44) - Saprolite - white + tan SAND, wet moist to		
40-43			<0.1		boring terminated @ ~43ft bls close to DPT refusal to set temp well		

Notes:

• Screen ~ 33-43 ft bls

ppm: parts per million

ppb: parts per billion

NA= Not applicable

bls = below land surface

Lithology Log



Boring ID: SB01

Project Number: 70167318		Start Date/Time: 8/11/16 16:50		Sample Method	Drilling Method		
Site Location: Raleigh, NC		End Date/Time: 8/11/16 17:25		<input type="checkbox"/> Hand Auger	<input checked="" type="checkbox"/> DPT		
Weather: 80s° F, overcast		Boring Diameter: 2"		<input checked="" type="checkbox"/> Macro-Core	<input type="checkbox"/> HSA		
Logged By: CMP		Total Depth: 19'		<input type="checkbox"/> Split Spoon	<input type="checkbox"/> Mud Rotary		
Drilling Sub: Regional Probing		Water Level: dry		<input type="checkbox"/> Shelby Tube	<input type="checkbox"/> Air Rotary		
Drill Rig: Geoprobe 5410		Well Installed: No			<input type="checkbox"/> Rock Core		
Depth (ft bls)	Recovery (inches)	Blow Counts (n)	PID (ppm) / ppb	U.S.C.S	(Depth interval) Color, MAIN COMPONENT, minor component(s), structure, moisture, angularity, odor, staining	Lab Sample: ID, analysis, time	Drilling method, tooling, depth
0-4	48"	NA	>0.1	CL	(0-4) - red-brown CLAY mica-rich, slightly sandy no odor	NA	Hand auger
4-8	40"	NA	>0.1	SM	(4-7) - " " (7-8) - white + tan saprolite, silty SAND, no odor		
8-12	44"	10ft: 12.2 *12ft: 331.5		ML	(8-8.5) - " " (8.5-12) - red-brown to light brown SILT w/ some clay mica-rich, strong petroleum odor	SB01 (10-12) 8260 + UPH 17:40	
12-16	42"	13ft: 749.1 15ft: 421.2		ML	(12-16) - light brown to grey brown SILT, mica-rich strong petroleum odor		
16-20 19	38"	*17ft: 1286 19ft: 361.9		ML	(16-18) - tan white to grey-brown sandy SILT + small gravelly layer (18-19) - " " strong petroleum odor slightly moist?	SB-01 (16-18) 8260 + MADEPUPH 17:30	
					Boring terminated @ ~19 ft bls		

Notes:

ppm: parts per million

ppb: parts per billion

NA= Not applicable

bls = below land surface

APPENDIX B

ANALYTICAL REPORTS AND CHAIN OF CUSTODY RECORDS

August 19, 2016

Justin Fabriziani
Terracon - Raleigh, NC
2401 Brentwood Road, Suite 107
Raleigh, NC 27604

Project Location: Employment Security Commission
Client Job Number:
Project Number: 70167318
Laboratory Work Order Number: 16H0673

Enclosed are results of analyses for samples received by the laboratory on August 12, 2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Lisa A. Worthington", is displayed on a light gray rectangular background.

Lisa A. Worthington
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Terracon - Raleigh, NC
 2401 Brentwood Road, Suite 107
 Raleigh, NC 27604
 ATTN: Justin Fabriziani

REPORT DATE: 8/19/2016

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 70167318

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 16H0673

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Employment Security Commission

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SB-01 (16-18)	16H0673-01	Soil		MADEP-VPH-04-1.1 SM 2540G SW-846 8260B	
TW-01	16H0673-02	Ground Water		SW-846 8260B	
TW-02	16H0673-03	Ground Water		SW-846 8260B	
TW-03	16H0673-04	Ground Water		SW-846 8260B	
TW-04	16H0673-05	Ground Water		SW-846 8260B	
TW-05	16H0673-06	Ground Water		SW-846 8260B	
SB-01 (10-12)	16H0673-07	Soil		MADEP-VPH-04-1.1 SM 2540G SW-846 8260B	
DW-1	16H0673-08	Ground Water		MADEP-VPH-04-1.1 SW-846 8260B	
MW-1	16H0673-09	Ground Water		MADEP-VPH-04-1.1 SW-846 8260B	
SW-2	16H0673-10	Ground Water		MADEP-VPH-04-1.1 SW-846 8260B	
SW-A	16H0673-11	Ground Water		MADEP-VPH-04-1.1 SW-846 8260B	
SW-B	16H0673-12	Ground Water		MADEP-VPH-04-1.1 SW-846 8260B	
SW-C	16H0673-13	Ground Water		MADEP-VPH-04-1.1 SW-846 8260B	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

MADEP-VPH-04-1.1**Qualifications:****RL-05**

Elevated reporting limit due to high concentration of target compounds. MA CAM reporting limit not met.

Analyte & Samples(s) Qualified:**C5-C8 Aliphatics**

16H0673-01[SB-01 (16-18)], 16H0673-07[SB-01 (10-12)]

Unadjusted C5-C8 Aliphatics

16H0673-01[SB-01 (16-18)], 16H0673-07[SB-01 (10-12)]

SW-846 8260B**Qualifications:****L-02**

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:**Acrylonitrile**

B156193-BS1, B156193-BSD1

L-04

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:**1,2-Dibromo-3-chloropropane (DB)**

16H0673-01[SB-01 (16-18)], 16H0673-07[SB-01 (10-12)], B156191-BLK1, B156191-BS1, B156191-BSD1

Bromoform

16H0673-01[SB-01 (16-18)], 16H0673-07[SB-01 (10-12)], B156191-BLK1, B156191-BS1, B156191-BSD1

Dichlorodifluoromethane (Freon 1)

16H0673-02[TW-01], 16H0673-03[TW-02], 16H0673-04[TW-03], 16H0673-05[TW-04], 16H0673-06[TW-05], 16H0673-08[DW-1], 16H0673-09[MW-1], 16H0673-10[SW-2], 16H0673-11[SW-A], 16H0673-12[SW-B], 16H0673-13[SW-C], B156193-BLK1, B156193-BS1, B156193-BSD1

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:**2-Hexanone (MBK)**

B156191-BS1

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

16H0673-01[SB-01 (16-18)], 16H0673-07[SB-01 (10-12)], 16H0673-09[MW-1]

V-05

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

Analyte & Samples(s) Qualified:**1,2-Dibromo-3-chloropropane (DB)**

16H0673-01[SB-01 (16-18)], 16H0673-07[SB-01 (10-12)], B156191-BLK1, B156191-BS1, B156191-BSD1

1,4-Dioxane

16H0673-01[SB-01 (16-18)], 16H0673-07[SB-01 (10-12)], B156191-BLK1, B156191-BS1, B156191-BSD1

Bromoform

16H0673-01[SB-01 (16-18)], 16H0673-07[SB-01 (10-12)], B156191-BLK1, B156191-BS1, B156191-BSD1

V-20

Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:**Acrylonitrile**

B156193-BS1, B156193-BSD1

Bromomethane

B156191-BS1, B156191-BSD1

Chloromethane

B156191-BS1, B156191-BSD1

MADEP-VPH-04-1.1

No significant modifications were made to the method. All VPH samples were received preserved properly at pH <2 in the proper containers as specified on the chain-of-custody form unless specified in this narrative.

No significant modifications were made to the method. All VPH samples were received preserved properly in methanol with a soil/methanol ratio of 1:1 +/- 25% completely covered by methanol in the proper containers specified on the chain-of-custody form unless specified in this narrative.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink, appearing to read "Lisa A. Worthington", is written over a light gray rectangular background.

Lisa A. Worthington
Project Manager

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SB-01 (16-18)

Sampled: 8/11/2016 17:30

Sample ID: 16H0673-01

Sample Matrix: Soil

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	150	14	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Acrylonitrile	ND	15	1.7	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
tert-Amyl Methyl Ether (TAME)	ND	1.5	0.31	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Benzene	ND	2.9	0.35	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Bromobenzene	ND	2.9	0.44	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Bromochloromethane	ND	2.9	0.65	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Bromodichloromethane	ND	2.9	0.86	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Bromoform	ND	5.9	0.62	mg/Kg dry	50	L-04, V-05	SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Bromomethane	ND	5.9	2.8	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
2-Butanone (MEK)	ND	59	6.9	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
tert-Butyl Alcohol (TBA)	ND	59	6.4	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
n-Butylbenzene	51	2.9	0.44	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
sec-Butylbenzene	16	2.9	0.38	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
tert-Butylbenzene	0.70	2.9	0.35	mg/Kg dry	50	J	SW-846 8260B	8/15/16	8/18/16 13:57	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	1.5	0.28	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Carbon Disulfide	ND	8.8	3.0	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Carbon Tetrachloride	ND	2.9	0.72	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Chlorobenzene	ND	2.9	0.47	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Chlorodibromomethane	ND	1.5	0.30	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Chloroethane	ND	5.9	0.82	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Chloroform	ND	5.9	0.64	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Chloromethane	ND	5.9	1.6	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
2-Chlorotoluene	ND	2.9	0.35	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
4-Chlorotoluene	ND	2.9	0.41	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	15	1.1	mg/Kg dry	50	L-04, V-05	SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,2-Dibromoethane (EDB)	ND	1.5	0.43	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Dibromomethane	ND	2.9	0.47	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,2-Dichlorobenzene	ND	2.9	0.50	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,3-Dichlorobenzene	ND	2.9	0.50	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,4-Dichlorobenzene	ND	2.9	0.44	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
trans-1,4-Dichloro-2-butene	ND	5.9	0.91	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Dichlorodifluoromethane (Freon 12)	ND	5.9	0.83	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,1-Dichloroethane	ND	2.9	0.46	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,2-Dichloroethane	ND	2.9	0.57	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,1-Dichloroethylene	ND	2.9	0.62	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
cis-1,2-Dichloroethylene	ND	2.9	0.43	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
trans-1,2-Dichloroethylene	ND	2.9	0.44	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,2-Dichloropropane	ND	2.9	0.38	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,3-Dichloropropane	ND	1.5	0.38	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
2,2-Dichloropropane	ND	2.9	0.62	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,1-Dichloropropene	ND	5.9	0.37	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
cis-1,3-Dichloropropene	ND	1.5	0.35	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
trans-1,3-Dichloropropene	ND	1.5	0.33	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Diethyl Ether	ND	5.9	0.65	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SB-01 (16-18)

Sampled: 8/11/2016 17:30

Sample ID: 16H0673-01

Sample Matrix: Soil

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	1.5	0.53	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,4-Dioxane	ND	150	78	mg/Kg dry	50	V-05	SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Ethylbenzene	11	2.9	0.38	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Hexachlorobutadiene	ND	2.9	1.7	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
2-Hexanone (MBK)	ND	29	4.5	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Isopropylbenzene (Cumene)	15	2.9	0.35	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
p-Isopropyltoluene (p-Cymene)	11	2.9	0.44	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Methyl tert-Butyl Ether (MTBE)	ND	2.9	0.26	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Methylene Chloride	ND	15	9.3	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
4-Methyl-2-pentanone (MIBK)	ND	29	4.3	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Naphthalene	130	5.9	0.35	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
n-Propylbenzene	39	2.9	0.38	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Styrene	ND	2.9	0.44	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,1,1,2-Tetrachloroethane	ND	2.9	0.35	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,1,2,2-Tetrachloroethane	ND	1.5	0.47	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Tetrachloroethylene	ND	2.9	0.80	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Tetrahydrofuran	ND	29	3.1	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Toluene	1.5	2.9	0.50	mg/Kg dry	50	J	SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,2,3-Trichlorobenzene	ND	15	0.41	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,2,4-Trichlorobenzene	ND	2.9	0.56	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,3,5-Trichlorobenzene	ND	2.9	0.50	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,1,1-Trichloroethane	ND	2.9	0.38	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,1,2-Trichloroethane	ND	2.9	0.69	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Trichloroethylene	ND	2.9	0.59	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Trichlorofluoromethane (Freon 11)	ND	5.9	0.43	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,2,3-Trichloropropane	ND	5.9	0.63	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.9	0.57	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
1,2,4-Trimethylbenzene	670	59	11	mg/Kg dry	1000		SW-846 8260B	8/19/16	8/19/16 7:48	EEH
1,3,5-Trimethylbenzene	310	2.9	0.38	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
Vinyl Chloride	ND	5.9	0.39	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
m+p Xylene	300	5.9	0.75	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH
o-Xylene	150	2.9	0.38	mg/Kg dry	50		SW-846 8260B	8/15/16	8/18/16 13:57	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	101	70-130	8/19/16 7:48
1,2-Dichloroethane-d4	103	70-130	8/18/16 13:57
Toluene-d8	102	70-130	8/19/16 7:48
Toluene-d8	102	70-130	8/18/16 13:57
4-Bromofluorobenzene	97.3	70-130	8/19/16 7:48
4-Bromofluorobenzene	104	70-130	8/18/16 13:57

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SB-01 (16-18)

Sampled: 8/11/2016 17:30

Sample ID: 16H0673-01

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.19

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	2200	mg/Kg dry	200	RL-05	MADEP-VPH-04-1.1	8/16/16	8/17/16 6:33	EEH
C5-C8 Aliphatics	ND	2200	mg/Kg dry	200	RL-05	MADEP-VPH-04-1.1	8/16/16	8/17/16 6:33	EEH
Unadjusted C9-C12 Aliphatics	6200	2200	mg/Kg dry	200		MADEP-VPH-04-1.1	8/16/16	8/17/16 6:33	EEH
C9-C12 Aliphatics	ND	2200	mg/Kg dry	200		MADEP-VPH-04-1.1	8/16/16	8/17/16 6:33	EEH
C9-C10 Aromatics	4900	2200	mg/Kg dry	200		MADEP-VPH-04-1.1	8/16/16	8/17/16 6:33	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2,5-Dibromotoluene (FID)	76.8		70-130				8/17/16 6:33		
2,5-Dibromotoluene (PID)	75.9		70-130				8/17/16 6:33		

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SB-01 (16-18)

Sampled: 8/11/2016 17:30

Sample ID: 16H0673-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.0		% Wt	1		SM 2540G	8/15/16	8/16/16 8:45	MRL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: TW-01

Sampled: 8/11/2016 17:00

Sample ID: 16H0673-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.9	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	L-04	SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: TW-01

Sampled: 8/11/2016 17:00

Sample ID: 16H0673-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Tetrachloroethylene	ND	1.0	0.27	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:23	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	99.7	70-130	8/17/16 9:23
Toluene-d8	100	70-130	8/17/16 9:23
4-Bromofluorobenzene	99.3	70-130	8/17/16 9:23

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: TW-02

Sampled: 8/11/2016 18:05

Sample ID: 16H0673-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.9	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
tert-Butyl Alcohol (TBA)	5.5	20	2.2	µg/L	1	J	SW-846 8260B	8/16/16	8/17/16 4:54	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	L-04	SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: TW-02

Sampled: 8/11/2016 18:05

Sample ID: 16H0673-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Tetrachloroethylene	0.36	1.0	0.27	µg/L	1	J	SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 4:54	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	99.4	70-130	8/17/16 4:54
Toluene-d8	102	70-130	8/17/16 4:54
4-Bromofluorobenzene	97.2	70-130	8/17/16 4:54

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: TW-03

Sampled: 8/11/2016 15:10

Sample ID: 16H0673-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.9	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Chloroform	0.49	2.0	0.22	µg/L	1	J	SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	L-04	SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: TW-03

Sampled: 8/11/2016 15:10

Sample ID: 16H0673-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Tetrachloroethylene	ND	1.0	0.27	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 9:50	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	97.1	70-130	8/17/16 9:50
Toluene-d8	101	70-130	8/17/16 9:50
4-Bromofluorobenzene	97.4	70-130	8/17/16 9:50

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Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: TW-04

Sampled: 8/11/2016 15:50

Sample ID: 16H0673-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.9	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Chloroform	0.45	2.0	0.22	µg/L	1	J	SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	L-04	SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: TW-04

Sampled: 8/11/2016 15:50

Sample ID: 16H0673-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Methyl tert-Butyl Ether (MTBE)	0.85	1.0	0.090	µg/L	1	J	SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Tetrachloroethylene	0.79	1.0	0.27	µg/L	1	J	SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:21	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	97.7	70-130	8/17/16 5:21
Toluene-d8	100	70-130	8/17/16 5:21
4-Bromofluorobenzene	98.8	70-130	8/17/16 5:21

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Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: TW-05

Sampled: 8/11/2016 18:40

Sample ID: 16H0673-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.9	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	L-04	SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: TW-05

Sampled: 8/11/2016 18:40

Sample ID: 16H0673-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Tetrachloroethylene	ND	1.0	0.27	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 10:17	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	96.3	70-130	8/17/16 10:17
Toluene-d8	100	70-130	8/17/16 10:17
4-Bromofluorobenzene	97.4	70-130	8/17/16 10:17

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SB-01 (10-12)

Sampled: 8/11/2016 17:40

Sample ID: 16H0673-07

Sample Matrix: Soil

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	170	17	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Acrylonitrile	ND	17	2.0	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
tert-Amyl Methyl Ether (TAME)	ND	1.7	0.37	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Benzene	ND	3.5	0.41	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Bromobenzene	ND	3.5	0.52	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Bromochloromethane	ND	3.5	0.77	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Bromodichloromethane	ND	3.5	1.0	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Bromoform	ND	6.9	0.73	mg/Kg dry	50	L-04, V-05	SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Bromomethane	ND	6.9	3.2	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
2-Butanone (MEK)	ND	69	8.2	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
tert-Butyl Alcohol (TBA)	ND	69	7.5	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
n-Butylbenzene	32	3.5	0.52	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
sec-Butylbenzene	8.2	3.5	0.45	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
tert-Butylbenzene	0.69	3.5	0.42	mg/Kg dry	50	J	SW-846 8260B	8/16/16	8/18/16 14:24	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	1.7	0.33	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Carbon Disulfide	ND	10	3.5	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Carbon Tetrachloride	ND	3.5	0.85	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Chlorobenzene	ND	3.5	0.55	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Chlorodibromomethane	ND	1.7	0.36	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Chloroethane	ND	6.9	0.97	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Chloroform	ND	6.9	0.76	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Chloromethane	ND	6.9	1.9	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
2-Chlorotoluene	ND	3.5	0.41	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
4-Chlorotoluene	ND	3.5	0.48	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	17	1.3	mg/Kg dry	50	L-04, V-05	SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,2-Dibromoethane (EDB)	ND	1.7	0.51	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Dibromomethane	ND	3.5	0.55	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,2-Dichlorobenzene	ND	3.5	0.59	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,3-Dichlorobenzene	ND	3.5	0.59	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,4-Dichlorobenzene	ND	3.5	0.52	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
trans-1,4-Dichloro-2-butene	ND	6.9	1.1	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Dichlorodifluoromethane (Freon 12)	ND	6.9	0.98	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,1-Dichloroethane	ND	3.5	0.55	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,2-Dichloroethane	ND	3.5	0.67	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,1-Dichloroethylene	ND	3.5	0.73	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
cis-1,2-Dichloroethylene	ND	3.5	0.51	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
trans-1,2-Dichloroethylene	ND	3.5	0.52	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,2-Dichloropropane	ND	3.5	0.45	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,3-Dichloropropane	ND	1.7	0.45	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
2,2-Dichloropropane	ND	3.5	0.74	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,1-Dichloropropene	ND	6.9	0.44	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
cis-1,3-Dichloropropene	ND	1.7	0.41	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
trans-1,3-Dichloropropene	ND	1.7	0.39	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Diethyl Ether	ND	6.9	0.77	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SB-01 (10-12)

Sampled: 8/11/2016 17:40

Sample ID: 16H0673-07

Sample Matrix: Soil

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	1.7	0.63	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,4-Dioxane	ND	170	92	mg/Kg dry	50	V-05	SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Ethylbenzene	ND	3.5	0.45	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Hexachlorobutadiene	ND	3.5	2.0	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
2-Hexanone (MBK)	ND	35	5.2	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Isopropylbenzene (Cumene)	0.79	3.5	0.41	mg/Kg dry	50	J	SW-846 8260B	8/16/16	8/18/16 14:24	EEH
p-Isopropyltoluene (p-Cymene)	8.7	3.5	0.52	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Methyl tert-Butyl Ether (MTBE)	ND	3.5	0.31	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Methylene Chloride	ND	17	11	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
4-Methyl-2-pentanone (MIBK)	ND	35	5.1	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Naphthalene	31	6.9	0.42	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
n-Propylbenzene	1.6	3.5	0.45	mg/Kg dry	50	J	SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Styrene	ND	3.5	0.52	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,1,1,2-Tetrachloroethane	ND	3.5	0.41	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,1,2,2-Tetrachloroethane	ND	1.7	0.55	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Tetrachloroethylene	ND	3.5	0.94	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Tetrahydrofuran	ND	35	3.7	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Toluene	ND	3.5	0.59	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,2,3-Trichlorobenzene	ND	17	0.48	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,2,4-Trichlorobenzene	ND	3.5	0.66	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,3,5-Trichlorobenzene	ND	3.5	0.59	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,1,1-Trichloroethane	ND	3.5	0.45	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,1,2-Trichloroethane	ND	3.5	0.82	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Trichloroethylene	ND	3.5	0.69	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Trichlorofluoromethane (Freon 11)	ND	6.9	0.51	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,2,3-Trichloropropane	ND	6.9	0.74	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	3.5	0.67	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,2,4-Trimethylbenzene	160	3.5	0.62	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
1,3,5-Trimethylbenzene	220	3.5	0.45	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
Vinyl Chloride	ND	6.9	0.46	mg/Kg dry	50		SW-846 8260B	8/16/16	8/18/16 14:24	EEH
m+p Xylene	3.0	6.9	0.88	mg/Kg dry	50	J	SW-846 8260B	8/16/16	8/18/16 14:24	EEH
o-Xylene	1.9	3.5	0.45	mg/Kg dry	50	J	SW-846 8260B	8/16/16	8/18/16 14:24	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	102	70-130	8/18/16 14:24
Toluene-d8	99.6	70-130	8/18/16 14:24
4-Bromofluorobenzene	99.4	70-130	8/18/16 14:24

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SB-01 (10-12)

Sampled: 8/11/2016 17:40

Sample ID: 16H0673-07

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.12

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	1400	mg/Kg dry	100	RL-05	MADEP-VPH-04-1.1	8/16/16	8/17/16 7:09	EEH
C5-C8 Aliphatics	ND	1400	mg/Kg dry	100	RL-05	MADEP-VPH-04-1.1	8/16/16	8/17/16 7:09	EEH
Unadjusted C9-C12 Aliphatics	4600	1400	mg/Kg dry	100		MADEP-VPH-04-1.1	8/16/16	8/17/16 7:09	EEH
C9-C12 Aliphatics	ND	1400	mg/Kg dry	100		MADEP-VPH-04-1.1	8/16/16	8/17/16 7:09	EEH
C9-C10 Aromatics	3900	1400	mg/Kg dry	100		MADEP-VPH-04-1.1	8/16/16	8/17/16 7:09	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2,5-Dibromotoluene (FID)	74.9		70-130				8/17/16 7:09		
2,5-Dibromotoluene (PID)	79.3		70-130				8/17/16 7:09		

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SB-01 (10-12)

Sampled: 8/11/2016 17:40

Sample ID: 16H0673-07

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	81.0		% Wt	1		SM 2540G	8/15/16	8/16/16 8:45	MRL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: DW-1

Sampled: 8/12/2016 13:30

Sample ID: 16H0673-08

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.9	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	L-04	SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: DW-1

Sampled: 8/12/2016 13:30

Sample ID: 16H0673-08

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Tetrachloroethylene	ND	1.0	0.27	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 5:48	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	97.1	70-130	8/17/16 5:48
Toluene-d8	99.4	70-130	8/17/16 5:48
4-Bromofluorobenzene	97.2	70-130	8/17/16 5:48

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: DW-1

Sampled: 8/12/2016 13:30

Sample ID: 16H0673-08

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 18:04	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 18:04	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 18:04	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 18:04	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 18:04	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2,5-Dibromotoluene (FID)	86.0		70-130				8/16/16 18:04		
2,5-Dibromotoluene (PID)	71.2		70-130				8/16/16 18:04		

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: MW-1

Sampled: 8/12/2016 14:00

Sample ID: 16H0673-09

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2500	240	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Acrylonitrile	ND	250	29	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
tert-Amyl Methyl Ether (TAME)	ND	25	5.3	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Benzene	ND	50	6.0	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Bromobenzene	ND	50	7.5	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Bromochloromethane	ND	50	11	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Bromodichloromethane	ND	25	15	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Bromoform	ND	100	10	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Bromomethane	ND	100	47	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
2-Butanone (MEK)	ND	1000	120	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
tert-Butyl Alcohol (TBA)	2200	1000	110	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
n-Butylbenzene	13	50	7.5	µg/L	50	J	SW-846 8260B	8/16/16	8/17/16 10:43	EEH
sec-Butylbenzene	ND	50	6.5	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
tert-Butylbenzene	ND	50	6.0	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	25	4.8	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Carbon Disulfide	ND	200	51	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Carbon Tetrachloride	ND	250	12	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Chlorobenzene	ND	50	8.0	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Chlorodibromomethane	ND	25	5.2	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Chloroethane	ND	100	14	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Chloroform	ND	100	11	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Chloromethane	ND	100	28	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
2-Chlorotoluene	ND	50	6.0	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
4-Chlorotoluene	ND	50	7.0	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	18	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,2-Dibromoethane (EDB)	ND	25	7.4	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Dibromomethane	ND	50	8.0	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,2-Dichlorobenzene	ND	50	8.5	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,3-Dichlorobenzene	ND	50	8.5	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,4-Dichlorobenzene	ND	50	7.5	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
trans-1,4-Dichloro-2-butene	ND	100	16	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Dichlorodifluoromethane (Freon 12)	ND	100	14	µg/L	50	L-04	SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,1-Dichloroethane	ND	50	7.9	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,2-Dichloroethane	ND	50	9.7	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,1-Dichloroethylene	ND	50	10	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
cis-1,2-Dichloroethylene	ND	50	7.4	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
trans-1,2-Dichloroethylene	ND	50	7.5	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,2-Dichloropropane	ND	50	6.5	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,3-Dichloropropane	ND	25	6.5	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
2,2-Dichloropropane	ND	50	11	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,1-Dichloropropene	ND	100	6.4	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
cis-1,3-Dichloropropene	ND	25	6.0	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
trans-1,3-Dichloropropene	ND	25	5.6	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Diethyl Ether	ND	100	11	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: MW-1

Sampled: 8/12/2016 14:00

Sample ID: 16H0673-09

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	25	9.0	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,4-Dioxane	ND	2500	1300	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Ethylbenzene	87	50	6.5	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Hexachlorobutadiene	ND	30	29	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
2-Hexanone (MBK)	ND	500	76	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Isopropylbenzene (Cumene)	12	50	6.0	µg/L	50	J	SW-846 8260B	8/16/16	8/17/16 10:43	EEH
p-Isopropyltoluene (p-Cymene)	9.5	50	7.5	µg/L	50	J	SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Methyl tert-Butyl Ether (MTBE)	ND	50	4.5	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Methylene Chloride	ND	250	160	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
4-Methyl-2-pentanone (MIBK)	ND	500	73	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Naphthalene	420	100	6.0	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
n-Propylbenzene	12	50	6.5	µg/L	50	J	SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Styrene	ND	50	7.5	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,1,1,2-Tetrachloroethane	ND	50	6.0	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,1,2,2-Tetrachloroethane	ND	25	8.0	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Tetrachloroethylene	ND	50	14	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Tetrahydrofuran	ND	500	54	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Toluene	86	50	8.5	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,2,3-Trichlorobenzene	ND	250	7.0	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,2,4-Trichlorobenzene	ND	50	9.5	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,3,5-Trichlorobenzene	ND	50	8.5	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,1,1-Trichloroethane	ND	50	6.6	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,1,2-Trichloroethane	ND	50	12	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Trichloroethylene	ND	50	10	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Trichlorofluoromethane (Freon 11)	ND	100	7.4	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,2,3-Trichloropropane	ND	100	11	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	50	9.8	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,2,4-Trimethylbenzene	2400	50	9.0	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
1,3,5-Trimethylbenzene	910	50	6.5	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
Vinyl Chloride	ND	100	6.6	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
m+p Xylene	2700	100	13	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH
o-Xylene	2800	50	6.6	µg/L	50		SW-846 8260B	8/16/16	8/17/16 10:43	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	98.9	70-130	8/17/16 10:43
Toluene-d8	99.9	70-130	8/17/16 10:43
4-Bromofluorobenzene	101	70-130	8/17/16 10:43

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: MW-1

Sampled: 8/12/2016 14:00

Sample ID: 16H0673-09

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	2400	1000	µg/L	10		MADEP-VPH-04-1.1	8/16/16	8/17/16 7:06	EEH
C5-C8 Aliphatics	2300	1000	µg/L	10		MADEP-VPH-04-1.1	8/16/16	8/17/16 7:06	EEH
Unadjusted C9-C12 Aliphatics	9900	1000	µg/L	10		MADEP-VPH-04-1.1	8/16/16	8/17/16 7:06	EEH
C9-C12 Aliphatics	ND	1000	µg/L	10		MADEP-VPH-04-1.1	8/16/16	8/17/16 7:06	EEH
C9-C10 Aromatics	7600	1000	µg/L	10		MADEP-VPH-04-1.1	8/16/16	8/17/16 7:06	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2,5-Dibromotoluene (FID)	88.7		70-130				8/17/16 7:06		
2,5-Dibromotoluene (PID)	77.5		70-130				8/17/16 7:06		

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Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SW-2

Sampled: 8/12/2016 12:45

Sample ID: 16H0673-10

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.9	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Bromodichloromethane	1.0	0.50	0.30	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Chloroform	3.3	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	L-04	SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SW-2

Sampled: 8/12/2016 12:45

Sample ID: 16H0673-10

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Methyl tert-Butyl Ether (MTBE)	0.11	1.0	0.090	µg/L	1	J	SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Tetrachloroethylene	ND	1.0	0.27	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Trichlorofluoromethane (Freon 11)	0.65	2.0	0.15	µg/L	1	J	SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,2,4-Trimethylbenzene	0.22	1.0	0.18	µg/L	1	J	SW-846 8260B	8/16/16	8/17/16 6:15	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:15	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	97.4	70-130	8/17/16 6:15
Toluene-d8	99.3	70-130	8/17/16 6:15
4-Bromofluorobenzene	98.3	70-130	8/17/16 6:15

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Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SW-2

Sampled: 8/12/2016 12:45

Sample ID: 16H0673-10

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 18:41	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 18:41	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 18:41	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 18:41	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 18:41	EEH
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2,5-Dibromotoluene (FID)		86.9	70-130					8/16/16 18:41	
2,5-Dibromotoluene (PID)		73.9	70-130					8/16/16 18:41	

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Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SW-A

Sampled: 8/12/2016 11:25

Sample ID: 16H0673-11

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.9	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	L-04	SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SW-A

Sampled: 8/12/2016 11:25

Sample ID: 16H0673-11

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Tetrachloroethylene	ND	1.0	0.27	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 6:41	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	96.4	70-130	8/17/16 6:41
Toluene-d8	99.1	70-130	8/17/16 6:41
4-Bromofluorobenzene	96.6	70-130	8/17/16 6:41

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SW-A

Sampled: 8/12/2016 11:25

Sample ID: 16H0673-11

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 19:17	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 19:17	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 19:17	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 19:17	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 19:17	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2,5-Dibromotoluene (FID)	89.2		70-130				8/16/16 19:17		
2,5-Dibromotoluene (PID)	75.3		70-130				8/16/16 19:17		

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SW-B

Sampled: 8/12/2016 10:10

Sample ID: 16H0673-12

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.9	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	L-04	SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SW-B

Sampled: 8/12/2016 10:10

Sample ID: 16H0673-12

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Tetrachloroethylene	ND	1.0	0.27	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:08	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	99.0	70-130	8/17/16 7:08
Toluene-d8	101	70-130	8/17/16 7:08
4-Bromofluorobenzene	96.6	70-130	8/17/16 7:08

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SW-B

Sampled: 8/12/2016 10:10

Sample ID: 16H0673-12

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 19:54	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 19:54	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 19:54	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 19:54	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 19:54	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2,5-Dibromotoluene (FID)	94.4		70-130				8/16/16 19:54		
2,5-Dibromotoluene (PID)	78.2		70-130				8/16/16 19:54		

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SW-C

Sampled: 8/12/2016 12:00

Sample ID: 16H0673-13

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.9	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	L-04	SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SW-C

Sampled: 8/12/2016 12:00

Sample ID: 16H0673-13

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Tetrachloroethylene	ND	1.0	0.27	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260B	8/16/16	8/17/16 7:35	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	98.4	70-130	8/17/16 7:35
Toluene-d8	101	70-130	8/17/16 7:35
4-Bromofluorobenzene	98.4	70-130	8/17/16 7:35

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Employment Security Commissio

Sample Description:

Work Order: 16H0673

Date Received: 8/12/2016

Field Sample #: SW-C

Sampled: 8/12/2016 12:00

Sample ID: 16H0673-13

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 20:30	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 20:30	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 20:30	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 20:30	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	8/16/16	8/16/16 20:30	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2,5-Dibromotoluene (FID)	90.7		70-130				8/16/16 20:30		
2,5-Dibromotoluene (PID)	76.4		70-130				8/16/16 20:30		

Sample Extraction Data

Prep Method: MA VPH-MADEP-VPH-04-1.1

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
16H0673-01 [SB-01 (16-18)]	B156172	5.90	5.80	08/16/16
16H0673-07 [SB-01 (10-12)]	B156172	5.60	6.20	08/16/16

Prep Method: MA VPH-MADEP-VPH-04-1.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16H0673-08 [DW-1]	B156171	5	5.00	08/16/16
16H0673-09 [MW-1]	B156171	0.5	5.00	08/16/16
16H0673-10 [SW-2]	B156171	5	5.00	08/16/16
16H0673-11 [SW-A]	B156171	5	5.00	08/16/16
16H0673-12 [SW-B]	B156171	5	5.00	08/16/16
16H0673-13 [SW-C]	B156171	5	5.00	08/16/16

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
16H0673-01 [SB-01 (16-18)]	B156107	08/15/16
16H0673-07 [SB-01 (10-12)]	B156107	08/15/16

Prep Method: SW-846 5035-SW-846 8260B

Lab Number [Field ID]	Batch	Sample Amount(g)	Methanol Volume(mL)	Methanol Aliquot(mL)	Final Volume(mL)	Date
16H0673-01 [SB-01 (16-18)]	B156191	5.49	5.66	0.02	50	08/15/16
16H0673-07 [SB-01 (10-12)]	B156191	5.38	6.02	0.02	50	08/16/16

Prep Method: SW-846 5035-SW-846 8260B

Lab Number [Field ID]	Batch	Sample Amount(g)	Methanol Volume(mL)	Methanol Aliquot(mL)	Final Volume(mL)	Date
16H0673-01RE1 [SB-01 (16-18)]	B156460	5.49	5.66	0.001	50	08/19/16

Prep Method: SW-846 5030B-SW-846 8260B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16H0673-02 [TW-01]	B156193	5	5.00	08/16/16
16H0673-03 [TW-02]	B156193	5	5.00	08/16/16
16H0673-04 [TW-03]	B156193	5	5.00	08/16/16
16H0673-05 [TW-04]	B156193	5	5.00	08/16/16
16H0673-06 [TW-05]	B156193	5	5.00	08/16/16
16H0673-08 [DW-1]	B156193	5	5.00	08/16/16
16H0673-09 [MW-1]	B156193	0.1	5.00	08/16/16
16H0673-10 [SW-2]	B156193	5	5.00	08/16/16
16H0673-11 [SW-A]	B156193	5	5.00	08/16/16
16H0673-12 [SW-B]	B156193	5	5.00	08/16/16
16H0673-13 [SW-C]	B156193	5	5.00	08/16/16

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B156191 - SW-846 5035

Blank (B156191-BLK1)

Prepared: 08/16/16 Analyzed: 08/18/16

Acetone	ND	2.5	mg/Kg wet							
Acrylonitrile	ND	0.25	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.025	mg/Kg wet							
Benzene	ND	0.050	mg/Kg wet							
Bromobenzene	ND	0.050	mg/Kg wet							
Bromochloromethane	ND	0.050	mg/Kg wet							
Bromodichloromethane	ND	0.050	mg/Kg wet							
Bromoform	ND	0.10	mg/Kg wet							L-04, V-05
Bromomethane	ND	0.10	mg/Kg wet							
2-Butanone (MEK)	ND	1.0	mg/Kg wet							
tert-Butyl Alcohol (TBA)	ND	1.0	mg/Kg wet							
n-Butylbenzene	ND	0.050	mg/Kg wet							
sec-Butylbenzene	ND	0.050	mg/Kg wet							
tert-Butylbenzene	ND	0.050	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.025	mg/Kg wet							
Carbon Disulfide	ND	0.15	mg/Kg wet							
Carbon Tetrachloride	ND	0.050	mg/Kg wet							
Chlorobenzene	ND	0.050	mg/Kg wet							
Chlorodibromomethane	ND	0.025	mg/Kg wet							
Chloroethane	ND	0.10	mg/Kg wet							
Chloroform	ND	0.10	mg/Kg wet							
Chloromethane	ND	0.10	mg/Kg wet							
2-Chlorotoluene	ND	0.050	mg/Kg wet							
4-Chlorotoluene	ND	0.050	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.25	mg/Kg wet							L-04, V-05
1,2-Dibromoethane (EDB)	ND	0.025	mg/Kg wet							
Dibromomethane	ND	0.050	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.050	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.050	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.050	mg/Kg wet							
trans-1,4-Dichloro-2-butene	ND	0.10	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.10	mg/Kg wet							
1,1-Dichloroethane	ND	0.050	mg/Kg wet							
1,2-Dichloroethane	ND	0.050	mg/Kg wet							
1,1-Dichloroethylene	ND	0.050	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.050	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.050	mg/Kg wet							
1,2-Dichloropropane	ND	0.050	mg/Kg wet							
1,3-Dichloropropane	ND	0.025	mg/Kg wet							
2,2-Dichloropropane	ND	0.050	mg/Kg wet							
1,1-Dichloropropene	ND	0.10	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.025	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.025	mg/Kg wet							
Diethyl Ether	ND	0.10	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.025	mg/Kg wet							
1,4-Dioxane	ND	2.5	mg/Kg wet							V-05
Ethylbenzene	ND	0.050	mg/Kg wet							
Hexachlorobutadiene	ND	0.050	mg/Kg wet							
2-Hexanone (MBK)	ND	0.50	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.050	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.050	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.050	mg/Kg wet							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B156191 - SW-846 5035

Blank (B156191-BLK1)

Prepared: 08/16/16 Analyzed: 08/18/16

Methylene Chloride	ND	0.25	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.50	mg/Kg wet							
Naphthalene	ND	0.10	mg/Kg wet							
n-Propylbenzene	ND	0.050	mg/Kg wet							
Styrene	ND	0.050	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.050	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.025	mg/Kg wet							
Tetrachloroethylene	ND	0.050	mg/Kg wet							
Tetrahydrofuran	ND	0.50	mg/Kg wet							
Toluene	ND	0.050	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.25	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.050	mg/Kg wet							
1,3,5-Trichlorobenzene	ND	0.050	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.050	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.050	mg/Kg wet							
Trichloroethylene	ND	0.050	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.10	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.10	mg/Kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.050	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.050	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.050	mg/Kg wet							
Vinyl Chloride	ND	0.10	mg/Kg wet							
m+p Xylene	ND	0.10	mg/Kg wet							
o-Xylene	ND	0.050	mg/Kg wet							

Surrogate: 1,2-Dichloroethane-d4	0.0253		mg/Kg wet	0.0250		101	70-130			
Surrogate: Toluene-d8	0.0252		mg/Kg wet	0.0250		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.0241		mg/Kg wet	0.0250		96.4	70-130			

LCS (B156191-BS1)

Prepared: 08/16/16 Analyzed: 08/18/16

Acetone	0.0888	0.057	mg/Kg wet	0.113		78.4	70-160			†
Acrylonitrile	0.0125	0.0057	mg/Kg wet	0.0113		110	70-130			
tert-Amyl Methyl Ether (TAME)	0.00980	0.00057	mg/Kg wet	0.0113		86.5	70-130			
Benzene	0.0125	0.0011	mg/Kg wet	0.0113		110	70-130			
Bromobenzene	0.0115	0.0011	mg/Kg wet	0.0113		102	70-130			
Bromochloromethane	0.0123	0.0011	mg/Kg wet	0.0113		109	70-130			
Bromodichloromethane	0.0115	0.0011	mg/Kg wet	0.0113		102	70-130			
Bromoform	0.00763	0.0023	mg/Kg wet	0.0113		67.3 *	70-130			L-04, V-05
Bromomethane	0.00919	0.0023	mg/Kg wet	0.0113		81.1	40-130			V-20 †
2-Butanone (MEK)	0.0846	0.023	mg/Kg wet	0.113		74.7	70-160			†
tert-Butyl Alcohol (TBA)	0.0858	0.023	mg/Kg wet	0.113		75.7	40-130			†
n-Butylbenzene	0.0115	0.0011	mg/Kg wet	0.0113		102	70-130			
sec-Butylbenzene	0.0115	0.0011	mg/Kg wet	0.0113		102	70-130			
tert-Butylbenzene	0.0115	0.0011	mg/Kg wet	0.0113		101	70-160			†
tert-Butyl Ethyl Ether (TBEE)	0.0104	0.00057	mg/Kg wet	0.0113		91.7	70-130			
Carbon Disulfide	0.0133	0.0034	mg/Kg wet	0.0113		117	70-130			
Carbon Tetrachloride	0.0108	0.0011	mg/Kg wet	0.0113		95.0	70-130			
Chlorobenzene	0.0121	0.0011	mg/Kg wet	0.0113		107	70-130			
Chlorodibromomethane	0.0107	0.00057	mg/Kg wet	0.0113		94.7	70-130			
Chloroethane	0.0121	0.0023	mg/Kg wet	0.0113		107	70-130			
Chloroform	0.0125	0.0023	mg/Kg wet	0.0113		111	70-130			
Chloromethane	0.0103	0.0023	mg/Kg wet	0.0113		90.7	70-130			
2-Chlorotoluene	0.0108	0.0011	mg/Kg wet	0.0113		95.5	70-130			V-20

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B156191 - SW-846 5035										
LCS (B156191-BS1)										
					Prepared: 08/16/16 Analyzed: 08/18/16					
4-Chlorotoluene	0.0113	0.0011	mg/Kg wet	0.0113		99.8	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.00730	0.0057	mg/Kg wet	0.0113		64.4	* 70-130			L-04, V-05
1,2-Dibromoethane (EDB)	0.0123	0.00057	mg/Kg wet	0.0113		109	70-130			
Dibromomethane	0.0121	0.0011	mg/Kg wet	0.0113		107	70-130			
1,2-Dichlorobenzene	0.0113	0.0011	mg/Kg wet	0.0113		99.3	70-130			
1,3-Dichlorobenzene	0.0116	0.0011	mg/Kg wet	0.0113		102	70-130			
1,4-Dichlorobenzene	0.0113	0.0011	mg/Kg wet	0.0113		99.7	70-130			
trans-1,4-Dichloro-2-butene	0.00793	0.0023	mg/Kg wet	0.0113		70.0	70-130			
Dichlorodifluoromethane (Freon 12)	0.00824	0.0023	mg/Kg wet	0.0113		72.7	40-160			†
1,1-Dichloroethane	0.0124	0.0011	mg/Kg wet	0.0113		110	70-130			
1,2-Dichloroethane	0.0114	0.0011	mg/Kg wet	0.0113		101	70-130			
1,1-Dichloroethylene	0.0136	0.0011	mg/Kg wet	0.0113		120	70-130			
cis-1,2-Dichloroethylene	0.0120	0.0011	mg/Kg wet	0.0113		106	70-130			
trans-1,2-Dichloroethylene	0.0120	0.0011	mg/Kg wet	0.0113		106	70-130			
1,2-Dichloropropane	0.0116	0.0011	mg/Kg wet	0.0113		102	70-130			
1,3-Dichloropropane	0.0118	0.00057	mg/Kg wet	0.0113		104	70-130			
2,2-Dichloropropane	0.00972	0.0011	mg/Kg wet	0.0113		85.8	70-130			
1,1-Dichloropropene	0.0122	0.0023	mg/Kg wet	0.0113		107	70-130			
cis-1,3-Dichloropropene	0.0103	0.00057	mg/Kg wet	0.0113		90.7	70-130			
trans-1,3-Dichloropropene	0.0101	0.00057	mg/Kg wet	0.0113		88.9	70-130			
Diethyl Ether	0.0117	0.0023	mg/Kg wet	0.0113		103	70-130			
Diisopropyl Ether (DIPE)	0.0106	0.00057	mg/Kg wet	0.0113		93.7	70-130			
1,4-Dioxane	0.0611	0.057	mg/Kg wet	0.113		53.9	40-160			V-05 †
Ethylbenzene	0.0117	0.0011	mg/Kg wet	0.0113		103	70-130			
Hexachlorobutadiene	0.0111	0.0011	mg/Kg wet	0.0113		97.6	70-160			
2-Hexanone (MBK)	0.0776	0.011	mg/Kg wet	0.113		68.5	* 70-160			L-07 †
Isopropylbenzene (Cumene)	0.0137	0.0011	mg/Kg wet	0.0113		121	70-130			
p-Isopropyltoluene (p-Cymene)	0.0111	0.0011	mg/Kg wet	0.0113		98.0	70-130			
Methyl tert-Butyl Ether (MTBE)	0.00995	0.0011	mg/Kg wet	0.0113		87.8	70-130			
Methylene Chloride	0.0131	0.0057	mg/Kg wet	0.0113		116	40-160			†
4-Methyl-2-pentanone (MIBK)	0.0850	0.011	mg/Kg wet	0.113		75.0	70-160			†
Naphthalene	0.0100	0.0023	mg/Kg wet	0.0113		88.6	40-130			†
n-Propylbenzene	0.0110	0.0011	mg/Kg wet	0.0113		97.1	70-130			
Styrene	0.0115	0.0011	mg/Kg wet	0.0113		102	70-130			
1,1,1,2-Tetrachloroethane	0.0106	0.0011	mg/Kg wet	0.0113		93.6	70-130			
1,1,2,2-Tetrachloroethane	0.0106	0.00057	mg/Kg wet	0.0113		93.9	70-130			
Tetrachloroethylene	0.0117	0.0011	mg/Kg wet	0.0113		103	70-130			
Tetrahydrofuran	0.00867	0.011	mg/Kg wet	0.0113		76.5	70-130			J
Toluene	0.0123	0.0011	mg/Kg wet	0.0113		109	70-130			
1,2,3-Trichlorobenzene	0.0101	0.0057	mg/Kg wet	0.0113		89.2	70-130			
1,2,4-Trichlorobenzene	0.0104	0.0011	mg/Kg wet	0.0113		92.1	70-130			
1,3,5-Trichlorobenzene	0.00989	0.0011	mg/Kg wet	0.0113		87.3	70-130			
1,1,1-Trichloroethane	0.0117	0.0011	mg/Kg wet	0.0113		103	70-130			
1,1,2-Trichloroethane	0.0119	0.0011	mg/Kg wet	0.0113		105	70-130			
Trichloroethylene	0.0130	0.0011	mg/Kg wet	0.0113		115	70-130			
Trichlorofluoromethane (Freon 11)	0.0116	0.0023	mg/Kg wet	0.0113		102	70-130			
1,2,3-Trichloropropane	0.0109	0.0023	mg/Kg wet	0.0113		96.4	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0137	0.0011	mg/Kg wet	0.0113		121	70-130			
1,2,4-Trimethylbenzene	0.0112	0.0011	mg/Kg wet	0.0113		98.9	70-130			
1,3,5-Trimethylbenzene	0.0109	0.0011	mg/Kg wet	0.0113		96.4	70-130			
Vinyl Chloride	0.00989	0.0023	mg/Kg wet	0.0113		87.3	40-130			†

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B156191 - SW-846 5035										
LCS (B156191-BS1)										
Prepared: 08/16/16 Analyzed: 08/18/16										
m+p Xylene	0.0229	0.0023	mg/Kg wet	0.0227		101	70-130			
o-Xylene	0.0116	0.0011	mg/Kg wet	0.0113		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0282		mg/Kg wet	0.0283		99.6	70-130			
Surrogate: Toluene-d8	0.0288		mg/Kg wet	0.0283		102	70-130			
Surrogate: 4-Bromofluorobenzene	0.0278		mg/Kg wet	0.0283		98.0	70-130			
LCS Dup (B156191-BSD1)										
Prepared: 08/16/16 Analyzed: 08/18/16										
Acetone	0.0915	0.057	mg/Kg wet	0.113		80.8	70-160	2.98	25	†
Acrylonitrile	0.0127	0.0057	mg/Kg wet	0.0113		112	70-130	1.71	25	
tert-Amyl Methyl Ether (TAME)	0.0118	0.00057	mg/Kg wet	0.0113		104	70-130	18.8	25	
Benzene	0.0122	0.0011	mg/Kg wet	0.0113		108	70-130	2.20	25	
Bromobenzene	0.0114	0.0011	mg/Kg wet	0.0113		100	70-130	1.29	25	
Bromochloromethane	0.0126	0.0011	mg/Kg wet	0.0113		111	70-130	2.09	25	
Bromodichloromethane	0.0108	0.0011	mg/Kg wet	0.0113		95.1	70-130	6.51	25	
Bromoform	0.00737	0.0023	mg/Kg wet	0.0113		65.0 *	70-130	3.48	25	L-04, V-05
Bromomethane	0.0105	0.0023	mg/Kg wet	0.0113		92.8	40-130	13.5	25	V-20 †
2-Butanone (MEK)	0.0885	0.023	mg/Kg wet	0.113		78.1	70-160	4.49	25	†
tert-Butyl Alcohol (TBA)	0.0938	0.023	mg/Kg wet	0.113		82.8	40-130	8.95	25	†
n-Butylbenzene	0.0112	0.0011	mg/Kg wet	0.0113		98.9	70-130	2.79	25	
sec-Butylbenzene	0.0114	0.0011	mg/Kg wet	0.0113		101	70-130	0.891	25	
tert-Butylbenzene	0.0110	0.0011	mg/Kg wet	0.0113		97.4	70-160	3.83	25	†
tert-Butyl Ethyl Ether (TBEE)	0.0121	0.00057	mg/Kg wet	0.0113		107	70-130	15.0	25	
Carbon Disulfide	0.0137	0.0034	mg/Kg wet	0.0113		121	70-130	3.28	25	
Carbon Tetrachloride	0.0107	0.0011	mg/Kg wet	0.0113		94.5	70-130	0.528	25	
Chlorobenzene	0.0121	0.0011	mg/Kg wet	0.0113		107	70-130	0.374	25	
Chlorodibromomethane	0.0106	0.00057	mg/Kg wet	0.0113		93.9	70-130	0.848	25	
Chloroethane	0.0124	0.0023	mg/Kg wet	0.0113		110	70-130	2.68	25	
Chloroform	0.0127	0.0023	mg/Kg wet	0.0113		112	70-130	1.26	25	
Chloromethane	0.0110	0.0023	mg/Kg wet	0.0113		97.0	70-130	6.71	25	V-20
2-Chlorotoluene	0.0109	0.0011	mg/Kg wet	0.0113		96.4	70-130	0.938	25	
4-Chlorotoluene	0.0111	0.0011	mg/Kg wet	0.0113		97.8	70-130	2.02	25	
1,2-Dibromo-3-chloropropane (DBCP)	0.00764	0.0057	mg/Kg wet	0.0113		67.4 *	70-130	4.55	25	L-04, V-05
1,2-Dibromoethane (EDB)	0.0119	0.00057	mg/Kg wet	0.0113		105	70-130	3.56	25	
Dibromomethane	0.0124	0.0011	mg/Kg wet	0.0113		109	70-130	2.04	25	
1,2-Dichlorobenzene	0.0111	0.0011	mg/Kg wet	0.0113		97.9	70-130	1.42	25	
1,3-Dichlorobenzene	0.0112	0.0011	mg/Kg wet	0.0113		99.0	70-130	3.08	25	
1,4-Dichlorobenzene	0.0109	0.0011	mg/Kg wet	0.0113		96.5	70-130	3.26	25	
trans-1,4-Dichloro-2-butene	0.00849	0.0023	mg/Kg wet	0.0113		74.9	70-130	6.76	25	
Dichlorodifluoromethane (Freon 12)	0.00828	0.0023	mg/Kg wet	0.0113		73.1	40-160	0.549	25	†
1,1-Dichloroethane	0.0127	0.0011	mg/Kg wet	0.0113		112	70-130	1.90	25	
1,2-Dichloroethane	0.0114	0.0011	mg/Kg wet	0.0113		100	70-130	0.298	25	
1,1-Dichloroethylene	0.0137	0.0011	mg/Kg wet	0.0113		121	70-130	0.499	25	
cis-1,2-Dichloroethylene	0.0123	0.0011	mg/Kg wet	0.0113		108	70-130	1.96	25	
trans-1,2-Dichloroethylene	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130	1.52	25	
1,2-Dichloropropane	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130	2.04	25	
1,3-Dichloropropane	0.0118	0.00057	mg/Kg wet	0.0113		104	70-130	0.383	25	
2,2-Dichloropropane	0.0101	0.0011	mg/Kg wet	0.0113		89.4	70-130	4.11	25	
1,1-Dichloropropene	0.0121	0.0023	mg/Kg wet	0.0113		106	70-130	0.842	25	
cis-1,3-Dichloropropene	0.0101	0.00057	mg/Kg wet	0.0113		89.0	70-130	1.89	25	
trans-1,3-Dichloropropene	0.0105	0.00057	mg/Kg wet	0.0113		92.3	70-130	3.75	25	
Diethyl Ether	0.0118	0.0023	mg/Kg wet	0.0113		104	70-130	1.06	25	
Diisopropyl Ether (DIPE)	0.0104	0.00057	mg/Kg wet	0.0113		92.1	70-130	1.72	25	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B156191 - SW-846 5035

LCS Dup (B156191-BSD1)

Prepared: 08/16/16 Analyzed: 08/18/16

1,4-Dioxane	0.0668	0.057	mg/Kg wet	0.113		59.0	40-160	8.93	50	V-05 † ‡
Ethylbenzene	0.0116	0.0011	mg/Kg wet	0.0113		102	70-130	0.878	25	
Hexachlorobutadiene	0.0108	0.0011	mg/Kg wet	0.0113		95.3	70-160	2.38	25	
2-Hexanone (MBK)	0.0830	0.011	mg/Kg wet	0.113		73.2	70-160	6.67	25	†
Isopropylbenzene (Cumene)	0.0133	0.0011	mg/Kg wet	0.0113		118	70-130	2.52	25	
p-Isopropyltoluene (p-Cymene)	0.0109	0.0011	mg/Kg wet	0.0113		96.0	70-130	2.06	25	
Methyl tert-Butyl Ether (MTBE)	0.0115	0.0011	mg/Kg wet	0.0113		101	70-130	14.4	25	
Methylene Chloride	0.0134	0.0057	mg/Kg wet	0.0113		118	40-160	2.14	25	†
4-Methyl-2-pentanone (MIBK)	0.0873	0.011	mg/Kg wet	0.113		77.1	70-160	2.75	25	†
Naphthalene	0.0102	0.0023	mg/Kg wet	0.0113		90.4	40-130	2.01	25	†
n-Propylbenzene	0.0109	0.0011	mg/Kg wet	0.0113		96.6	70-130	0.516	25	
Styrene	0.0114	0.0011	mg/Kg wet	0.0113		100	70-130	1.68	25	
1,1,1,2-Tetrachloroethane	0.0105	0.0011	mg/Kg wet	0.0113		92.5	70-130	1.18	25	
1,1,2,2-Tetrachloroethane	0.0106	0.00057	mg/Kg wet	0.0113		93.2	70-130	0.748	25	
Tetrachloroethylene	0.0114	0.0011	mg/Kg wet	0.0113		101	70-130	1.87	25	
Tetrahydrofuran	0.00813	0.011	mg/Kg wet	0.0113		71.7	70-130	6.48	25	J
Toluene	0.0122	0.0011	mg/Kg wet	0.0113		108	70-130	0.831	25	
1,2,3-Trichlorobenzene	0.0104	0.0057	mg/Kg wet	0.0113		91.7	70-130	2.76	25	
1,2,4-Trichlorobenzene	0.0103	0.0011	mg/Kg wet	0.0113		90.5	70-130	1.75	25	
1,3,5-Trichlorobenzene	0.00975	0.0011	mg/Kg wet	0.0113		86.0	70-130	1.50	25	
1,1,1-Trichloroethane	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130	0.871	25	
1,1,2-Trichloroethane	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130	0.0957	25	
Trichloroethylene	0.0125	0.0011	mg/Kg wet	0.0113		111	70-130	3.81	25	
Trichlorofluoromethane (Freon 11)	0.0118	0.0023	mg/Kg wet	0.0113		104	70-130	1.94	25	
1,2,3-Trichloropropane	0.0108	0.0023	mg/Kg wet	0.0113		95.1	70-130	1.36	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0139	0.0011	mg/Kg wet	0.0113		122	70-130	1.48	25	
1,2,4-Trimethylbenzene	0.0110	0.0011	mg/Kg wet	0.0113		97.4	70-130	1.53	25	
1,3,5-Trimethylbenzene	0.0106	0.0011	mg/Kg wet	0.0113		93.9	70-130	2.63	25	
Vinyl Chloride	0.00980	0.0023	mg/Kg wet	0.0113		86.5	40-130	0.921	25	†
m+p Xylene	0.0223	0.0023	mg/Kg wet	0.0227		98.3	70-130	2.81	25	
o-Xylene	0.0113	0.0011	mg/Kg wet	0.0113		99.9	70-130	2.47	25	
Surrogate: 1,2-Dichloroethane-d4	0.0294		mg/Kg wet	0.0283		104	70-130			
Surrogate: Toluene-d8	0.0291		mg/Kg wet	0.0283		103	70-130			
Surrogate: 4-Bromofluorobenzene	0.0278		mg/Kg wet	0.0283		98.2	70-130			

Batch B156193 - SW-846 5030B

Blank (B156193-BLK1)

Prepared: 08/16/16 Analyzed: 08/17/16

Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	2.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B156193 - SW-846 5030B

Blank (B156193-BLK1)

Prepared: 08/16/16 Analyzed: 08/17/16

tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	4.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							L-04
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.60	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B156193 - SW-846 5030B										
Blank (B156193-BLK1)										
Prepared: 08/16/16 Analyzed: 08/17/16										
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	25.3		µg/L	25.0		101	70-130			
Surrogate: Toluene-d8	25.2		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	24.8		µg/L	25.0		99.3	70-130			
LCS (B156193-BS1)										
Prepared: 08/16/16 Analyzed: 08/17/16										
Acetone	87.9	50	µg/L	100		87.9	70-160			†
Acrylonitrile	13.1	5.0	µg/L	10.0		131	* 70-130			L-02, V-20
tert-Amyl Methyl Ether (TAME)	10.0	0.50	µg/L	10.0		100	70-130			
Benzene	10.2	1.0	µg/L	10.0		102	70-130			
Bromobenzene	10.1	1.0	µg/L	10.0		101	70-130			
Bromochloromethane	9.99	1.0	µg/L	10.0		99.9	70-130			
Bromodichloromethane	9.91	0.50	µg/L	10.0		99.1	70-130			
Bromoform	7.75	2.0	µg/L	10.0		77.5	70-130			
Bromomethane	5.35	2.0	µg/L	10.0		53.5	40-160			†
2-Butanone (MEK)	89.6	20	µg/L	100		89.6	40-160			†
tert-Butyl Alcohol (TBA)	110	20	µg/L	100		110	40-160			†
n-Butylbenzene	10.3	1.0	µg/L	10.0		103	70-130			
sec-Butylbenzene	10.1	1.0	µg/L	10.0		101	70-130			
tert-Butylbenzene	9.77	1.0	µg/L	10.0		97.7	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.65	0.50	µg/L	10.0		96.5	70-130			
Carbon Disulfide	8.76	4.0	µg/L	10.0		87.6	70-130			
Carbon Tetrachloride	8.70	5.0	µg/L	10.0		87.0	70-130			
Chlorobenzene	10.6	1.0	µg/L	10.0		106	70-130			
Chlorodibromomethane	9.54	0.50	µg/L	10.0		95.4	70-130			
Chloroethane	9.32	2.0	µg/L	10.0		93.2	70-130			
Chloroform	10.2	2.0	µg/L	10.0		102	70-130			
Chloromethane	4.95	2.0	µg/L	10.0		49.5	40-160			†
2-Chlorotoluene	9.59	1.0	µg/L	10.0		95.9	70-130			
4-Chlorotoluene	9.97	1.0	µg/L	10.0		99.7	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	8.95	5.0	µg/L	10.0		89.5	70-130			
1,2-Dibromoethane (EDB)	11.3	0.50	µg/L	10.0		113	70-130			
Dibromomethane	10.4	1.0	µg/L	10.0		104	70-130			
1,2-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130			
1,3-Dichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130			
1,4-Dichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130			
trans-1,4-Dichloro-2-butene	9.12	2.0	µg/L	10.0		91.2	70-130			
Dichlorodifluoromethane (Freon 12)	3.70	2.0	µg/L	10.0		37.0	* 40-160			L-04 †
1,1-Dichloroethane	10.0	1.0	µg/L	10.0		100	70-130			
1,2-Dichloroethane	9.43	1.0	µg/L	10.0		94.3	70-130			
1,1-Dichloroethylene	10.6	1.0	µg/L	10.0		106	70-130			
cis-1,2-Dichloroethylene	9.78	1.0	µg/L	10.0		97.8	70-130			
trans-1,2-Dichloroethylene	9.32	1.0	µg/L	10.0		93.2	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B156193 - SW-846 5030B										
LCS (B156193-BS1)										
					Prepared: 08/16/16 Analyzed: 08/17/16					
1,2-Dichloropropane	9.44	1.0	µg/L	10.0		94.4	70-130			
1,3-Dichloropropane	10.3	0.50	µg/L	10.0		103	70-130			
2,2-Dichloropropane	7.84	1.0	µg/L	10.0		78.4	40-130			†
1,1-Dichloropropene	9.66	2.0	µg/L	10.0		96.6	70-130			
cis-1,3-Dichloropropene	8.81	0.50	µg/L	10.0		88.1	70-130			
trans-1,3-Dichloropropene	9.06	0.50	µg/L	10.0		90.6	70-130			
Diethyl Ether	10.6	2.0	µg/L	10.0		106	70-130			
Diisopropyl Ether (DIPE)	8.46	0.50	µg/L	10.0		84.6	70-130			
1,4-Dioxane	74.8	50	µg/L	100		74.8	40-130			†
Ethylbenzene	9.93	1.0	µg/L	10.0		99.3	70-130			
Hexachlorobutadiene	10.6	0.60	µg/L	10.0		106	70-130			
2-Hexanone (MBK)	84.3	10	µg/L	100		84.3	70-160			†
Isopropylbenzene (Cumene)	11.8	1.0	µg/L	10.0		118	70-130			
p-Isopropyltoluene (p-Cymene)	9.91	1.0	µg/L	10.0		99.1	70-130			
Methyl tert-Butyl Ether (MTBE)	9.89	1.0	µg/L	10.0		98.9	70-130			
Methylene Chloride	11.8	5.0	µg/L	10.0		118	70-130			
4-Methyl-2-pentanone (MIBK)	84.8	10	µg/L	100		84.8	70-160			†
Naphthalene	11.7	2.0	µg/L	10.0		117	40-130			†
n-Propylbenzene	9.80	1.0	µg/L	10.0		98.0	70-130			
Styrene	10.1	1.0	µg/L	10.0		101	70-130			
1,1,1,2-Tetrachloroethane	9.34	1.0	µg/L	10.0		93.4	70-130			
1,1,2,2-Tetrachloroethane	10.6	0.50	µg/L	10.0		106	70-130			
Tetrachloroethylene	9.66	1.0	µg/L	10.0		96.6	70-130			
Tetrahydrofuran	8.69	10	µg/L	10.0		86.9	70-130			J
Toluene	9.98	1.0	µg/L	10.0		99.8	70-130			
1,2,3-Trichlorobenzene	11.3	5.0	µg/L	10.0		113	70-130			
1,2,4-Trichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130			
1,3,5-Trichlorobenzene	9.75	1.0	µg/L	10.0		97.5	70-130			
1,1,1-Trichloroethane	9.60	1.0	µg/L	10.0		96.0	70-130			
1,1,2-Trichloroethane	10.7	1.0	µg/L	10.0		107	70-130			
Trichloroethylene	10.5	1.0	µg/L	10.0		105	70-130			
Trichlorofluoromethane (Freon 11)	9.17	2.0	µg/L	10.0		91.7	70-130			
1,2,3-Trichloropropane	10.5	2.0	µg/L	10.0		105	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.37	1.0	µg/L	10.0		93.7	70-130			
1,2,4-Trimethylbenzene	9.77	1.0	µg/L	10.0		97.7	70-130			
1,3,5-Trimethylbenzene	9.68	1.0	µg/L	10.0		96.8	70-130			
Vinyl Chloride	5.98	2.0	µg/L	10.0		59.8	40-160			†
m+p Xylene	19.7	2.0	µg/L	20.0		98.4	70-130			
o-Xylene	9.89	1.0	µg/L	10.0		98.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.1		µg/L	25.0		96.6	70-130			
Surrogate: Toluene-d8	25.2		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0		100	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B156193 - SW-846 5030B

LCS Dup (B156193-BSD1)

Prepared: 08/16/16 Analyzed: 08/17/16

Acetone	110	50	µg/L	100		110	70-160	22.2	25	†
Acrylonitrile	14.0	5.0	µg/L	10.0		140 *	70-130	6.86	25	L-02, V-20
tert-Amyl Methyl Ether (TAME)	10.2	0.50	µg/L	10.0		102	70-130	1.68	25	
Benzene	10.3	1.0	µg/L	10.0		103	70-130	1.47	25	
Bromobenzene	10.2	1.0	µg/L	10.0		102	70-130	1.48	25	
Bromochloromethane	10.1	1.0	µg/L	10.0		101	70-130	0.996	25	
Bromodichloromethane	9.82	0.50	µg/L	10.0		98.2	70-130	0.912	25	
Bromoform	8.33	2.0	µg/L	10.0		83.3	70-130	7.21	25	
Bromomethane	6.39	2.0	µg/L	10.0		63.9	40-160	17.7	25	†
2-Butanone (MEK)	105	20	µg/L	100		105	40-160	15.8	25	†
tert-Butyl Alcohol (TBA)	138	20	µg/L	100		138	40-160	22.6	25	†
n-Butylbenzene	10.4	1.0	µg/L	10.0		104	70-130	1.16	25	
sec-Butylbenzene	10.1	1.0	µg/L	10.0		101	70-130	0.792	25	
tert-Butylbenzene	9.83	1.0	µg/L	10.0		98.3	70-130	0.612	25	
tert-Butyl Ethyl Ether (TBEE)	9.98	0.50	µg/L	10.0		99.8	70-130	3.36	25	
Carbon Disulfide	8.48	4.0	µg/L	10.0		84.8	70-130	3.25	25	
Carbon Tetrachloride	8.91	5.0	µg/L	10.0		89.1	70-130	2.39	25	
Chlorobenzene	10.6	1.0	µg/L	10.0		106	70-130	0.755	25	
Chlorodibromomethane	9.87	0.50	µg/L	10.0		98.7	70-130	3.40	25	
Chloroethane	9.53	2.0	µg/L	10.0		95.3	70-130	2.23	25	
Chloroform	10.2	2.0	µg/L	10.0		102	70-130	0.685	25	
Chloromethane	5.14	2.0	µg/L	10.0		51.4	40-160	3.77	25	†
2-Chlorotoluene	9.48	1.0	µg/L	10.0		94.8	70-130	1.15	25	
4-Chlorotoluene	9.79	1.0	µg/L	10.0		97.9	70-130	1.82	25	
1,2-Dibromo-3-chloropropane (DBCP)	9.32	5.0	µg/L	10.0		93.2	70-130	4.05	25	
1,2-Dibromoethane (EDB)	11.3	0.50	µg/L	10.0		113	70-130	0.442	25	
Dibromomethane	10.9	1.0	µg/L	10.0		109	70-130	4.69	25	
1,2-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130	2.01	25	
1,3-Dichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130	0.293	25	
1,4-Dichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130	0.297	25	
trans-1,4-Dichloro-2-butene	9.55	2.0	µg/L	10.0		95.5	70-130	4.61	25	
Dichlorodifluoromethane (Freon 12)	3.89	2.0	µg/L	10.0		38.9 *	40-160	5.01	25	L-04 †
1,1-Dichloroethane	10.0	1.0	µg/L	10.0		100	70-130	0.100	25	
1,2-Dichloroethane	9.87	1.0	µg/L	10.0		98.7	70-130	4.56	25	
1,1-Dichloroethylene	10.7	1.0	µg/L	10.0		107	70-130	0.842	25	
cis-1,2-Dichloroethylene	9.68	1.0	µg/L	10.0		96.8	70-130	1.03	25	
trans-1,2-Dichloroethylene	9.53	1.0	µg/L	10.0		95.3	70-130	2.23	25	
1,2-Dichloropropane	9.33	1.0	µg/L	10.0		93.3	70-130	1.17	25	
1,3-Dichloropropane	10.6	0.50	µg/L	10.0		106	70-130	2.69	25	
2,2-Dichloropropane	7.76	1.0	µg/L	10.0		77.6	40-130	1.03	25	†
1,1-Dichloropropene	9.54	2.0	µg/L	10.0		95.4	70-130	1.25	25	
cis-1,3-Dichloropropene	8.75	0.50	µg/L	10.0		87.5	70-130	0.683	25	
trans-1,3-Dichloropropene	9.54	0.50	µg/L	10.0		95.4	70-130	5.16	25	
Diethyl Ether	11.0	2.0	µg/L	10.0		110	70-130	3.60	25	
Diisopropyl Ether (DIPE)	8.58	0.50	µg/L	10.0		85.8	70-130	1.41	25	
1,4-Dioxane	90.0	50	µg/L	100		90.0	40-130	18.4	50	† ‡
Ethylbenzene	9.86	1.0	µg/L	10.0		98.6	70-130	0.707	25	
Hexachlorobutadiene	10.9	0.60	µg/L	10.0		109	70-130	2.71	25	
2-Hexanone (MBK)	92.4	10	µg/L	100		92.4	70-160	9.21	25	†
Isopropylbenzene (Cumene)	11.7	1.0	µg/L	10.0		117	70-130	0.935	25	
p-Isopropyltoluene (p-Cymene)	9.87	1.0	µg/L	10.0		98.7	70-130	0.404	25	
Methyl tert-Butyl Ether (MTBE)	10.6	1.0	µg/L	10.0		106	70-130	6.55	25	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B156193 - SW-846 5030B

LCS Dup (B156193-BSD1)

Prepared: 08/16/16 Analyzed: 08/17/16

Methylene Chloride	12.2	5.0	µg/L	10.0		122	70-130	3.92	25	
4-Methyl-2-pentanone (MIBK)	91.7	10	µg/L	100		91.7	70-160	7.86	25	†
Naphthalene	12.9	2.0	µg/L	10.0		129	40-130	9.90	25	†
n-Propylbenzene	9.85	1.0	µg/L	10.0		98.5	70-130	0.509	25	
Styrene	10.2	1.0	µg/L	10.0		102	70-130	0.788	25	
1,1,1,2-Tetrachloroethane	9.43	1.0	µg/L	10.0		94.3	70-130	0.959	25	
1,1,2,2-Tetrachloroethane	11.3	0.50	µg/L	10.0		113	70-130	5.84	25	
Tetrachloroethylene	9.69	1.0	µg/L	10.0		96.9	70-130	0.310	25	
Tetrahydrofuran	9.79	10	µg/L	10.0		97.9	70-130	11.9	25	J
Toluene	9.87	1.0	µg/L	10.0		98.7	70-130	1.11	25	
1,2,3-Trichlorobenzene	12.4	5.0	µg/L	10.0		124	70-130	9.38	25	
1,2,4-Trichlorobenzene	10.7	1.0	µg/L	10.0		107	70-130	1.88	25	
1,3,5-Trichlorobenzene	10.0	1.0	µg/L	10.0		100	70-130	2.73	25	
1,1,1-Trichloroethane	9.50	1.0	µg/L	10.0		95.0	70-130	1.05	25	
1,1,2-Trichloroethane	10.9	1.0	µg/L	10.0		109	70-130	1.67	25	
Trichloroethylene	10.5	1.0	µg/L	10.0		105	70-130	0.0954	25	
Trichlorofluoromethane (Freon 11)	9.37	2.0	µg/L	10.0		93.7	70-130	2.16	25	
1,2,3-Trichloropropane	11.2	2.0	µg/L	10.0		112	70-130	7.01	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.98	1.0	µg/L	10.0		99.8	70-130	6.30	25	
1,2,4-Trimethylbenzene	9.78	1.0	µg/L	10.0		97.8	70-130	0.102	25	
1,3,5-Trimethylbenzene	9.72	1.0	µg/L	10.0		97.2	70-130	0.412	25	
Vinyl Chloride	5.81	2.0	µg/L	10.0		58.1	40-160	2.88	25	†
m+p Xylene	19.4	2.0	µg/L	20.0		96.8	70-130	1.64	25	
o-Xylene	9.80	1.0	µg/L	10.0		98.0	70-130	0.914	25	
Surrogate: 1,2-Dichloroethane-d4	25.4		µg/L	25.0		102	70-130			
Surrogate: Toluene-d8	24.9		µg/L	25.0		99.8	70-130			
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0		99.9	70-130			

Batch B156460 - SW-846 5035

Blank (B156460-BLK1)

Prepared: 08/18/16 Analyzed: 08/19/16

1,2,4-Trimethylbenzene	ND	0.0010	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0253		mg/Kg wet	0.0250		101	70-130			
Surrogate: Toluene-d8	0.0252		mg/Kg wet	0.0250		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.0246		mg/Kg wet	0.0250		98.2	70-130			

LCS (B156460-BS1)

Prepared: 08/18/16 Analyzed: 08/19/16

1,2,4-Trimethylbenzene	0.0114	0.0011	mg/Kg wet	0.0113		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0293		mg/Kg wet	0.0283		104	70-130			
Surrogate: Toluene-d8	0.0288		mg/Kg wet	0.0283		102	70-130			
Surrogate: 4-Bromofluorobenzene	0.0285		mg/Kg wet	0.0283		101	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B156460 - SW-846 5035

LCS Dup (B156460-BSD1)

Prepared: 08/18/16 Analyzed: 08/19/16

1,2,4-Trimethylbenzene	0.0108	0.0011	mg/Kg wet	0.0113		95.3	70-130	5.11	25	
Surrogate: 1,2-Dichloroethane-d4	0.0289		mg/Kg wet	0.0283		102	70-130			
Surrogate: Toluene-d8	0.0287		mg/Kg wet	0.0283		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.0279		mg/Kg wet	0.0283		98.6	70-130			

QUALITY CONTROL

Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B156171 - MA VPH

Blank (B156171-BLK1)

Prepared & Analyzed: 08/16/16

Unadjusted C5-C8 Aliphatics	ND	100	µg/L							
C5-C8 Aliphatics	ND	100	µg/L							
Unadjusted C9-C12 Aliphatics	ND	100	µg/L							
C9-C12 Aliphatics	ND	100	µg/L							
C9-C10 Aromatics	ND	100	µg/L							
Benzene	ND	1.0	µg/L							
Butylcyclohexane	ND	1.0	µg/L							
Decane	ND	1.0	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
2-Methylpentane	ND	1.0	µg/L							
Naphthalene	ND	5.0	µg/L							
Nonane	ND	1.0	µg/L							
Pentane	ND	1.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
2,2,4-Trimethylpentane	ND	1.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 2,5-Dibromotoluene (FID)	34.6		µg/L	40.0		86.6	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	28.2		µg/L	40.0		70.4	70-130			

LCS (B156171-BS1)

Prepared & Analyzed: 08/16/16

Benzene	100	1.0	µg/L	100		100	70-130			
Butylcyclohexane	93.6	1.0	µg/L	100		93.6	70-130			
Decane	106	1.0	µg/L	100		106	70-130			
Ethylbenzene	99.1	1.0	µg/L	100		99.1	70-130			
Methyl tert-Butyl Ether (MTBE)	111	1.0	µg/L	100		111	70-130			
2-Methylpentane	106	1.0	µg/L	100		106	70-130			
Naphthalene	89.0	5.0	µg/L	100		89.0	70-130			
Nonane	101	1.0	µg/L	100		101	70-130			
Pentane	83.5	1.0	µg/L	100		83.5	70-130			
Toluene	101	1.0	µg/L	100		101	70-130			
1,2,4-Trimethylbenzene	91.0	1.0	µg/L	100		91.0	70-130			
2,2,4-Trimethylpentane	96.3	1.0	µg/L	100		96.3	70-130			
m+p Xylene	192	2.0	µg/L	200		95.9	70-130			
o-Xylene	95.9	1.0	µg/L	100		95.9	70-130			
Surrogate: 2,5-Dibromotoluene (FID)	36.7		µg/L	40.0		91.7	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	28.6		µg/L	40.0		71.6	70-130			

LCS Dup (B156171-BSD1)

Prepared & Analyzed: 08/16/16

Benzene	94.4	1.0	µg/L	100		94.4	70-130	5.87	25	
Butylcyclohexane	92.6	1.0	µg/L	100		92.6	70-130	1.06	25	
Decane	107	1.0	µg/L	100		107	70-130	0.652	25	
Ethylbenzene	96.2	1.0	µg/L	100		96.2	70-130	2.95	25	
Methyl tert-Butyl Ether (MTBE)	111	1.0	µg/L	100		111	70-130	0.312	25	
2-Methylpentane	103	1.0	µg/L	100		103	70-130	2.34	25	
Naphthalene	92.8	5.0	µg/L	100		92.8	70-130	4.15	25	
Nonane	99.1	1.0	µg/L	100		99.1	70-130	1.59	25	
Pentane	81.2	1.0	µg/L	100		81.2	70-130	2.77	25	
Toluene	98.6	1.0	µg/L	100		98.6	70-130	2.62	25	
1,2,4-Trimethylbenzene	87.1	1.0	µg/L	100		87.1	70-130	4.43	25	

QUALITY CONTROL

Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B156171 - MA VPH

LCS Dup (B156171-BSD1)

Prepared & Analyzed: 08/16/16

2,2,4-Trimethylpentane	95.8	1.0	µg/L	100		95.8	70-130	0.542	25	
m+p Xylene	185	2.0	µg/L	200		92.4	70-130	3.77	25	
o-Xylene	92.0	1.0	µg/L	100		92.0	70-130	4.13	25	
Surrogate: 2,5-Dibromotoluene (FID)	38.0		µg/L	40.0		95.1	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	31.3		µg/L	40.0		78.2	70-130			

Batch B156172 - MA VPH

Blank (B156172-BLK1)

Prepared & Analyzed: 08/16/16

Unadjusted C5-C8 Aliphatics	ND	10	mg/Kg wet							
C5-C8 Aliphatics	ND	10	mg/Kg wet							
Unadjusted C9-C12 Aliphatics	ND	10	mg/Kg wet							
C9-C12 Aliphatics	ND	10	mg/Kg wet							
C9-C10 Aromatics	ND	10	mg/Kg wet							
Benzene	ND	0.050	mg/Kg wet							
Butylcyclohexane	ND	0.050	mg/Kg wet							
Decane	ND	0.050	mg/Kg wet							
Ethylbenzene	ND	0.050	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.050	mg/Kg wet							
2-Methylpentane	ND	0.050	mg/Kg wet							
Naphthalene	ND	0.50	mg/Kg wet							
Nonane	ND	0.050	mg/Kg wet							
Pentane	ND	0.050	mg/Kg wet							
Toluene	ND	0.050	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.050	mg/Kg wet							
2,2,4-Trimethylpentane	ND	0.050	mg/Kg wet							
m+p Xylene	ND	0.10	mg/Kg wet							
o-Xylene	ND	0.050	mg/Kg wet							
Surrogate: 2,5-Dibromotoluene (FID)	0.0411		mg/Kg wet	0.0400		103	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	0.0395		mg/Kg wet	0.0400		98.9	70-130			

LCS (B156172-BS1)

Prepared & Analyzed: 08/16/16

Benzene	0.115	0.0010	mg/Kg wet	0.100		115	70-130			
Butylcyclohexane	0.101	0.0010	mg/Kg wet	0.100		101	70-130			
Decane	0.124	0.0010	mg/Kg wet	0.100		124	70-130			
Ethylbenzene	0.102	0.0010	mg/Kg wet	0.100		102	70-130			
Methyl tert-Butyl Ether (MTBE)	0.115	0.0010	mg/Kg wet	0.100		115	70-130			
2-Methylpentane	0.102	0.0010	mg/Kg wet	0.100		102	70-130			
Naphthalene	0.0945	0.010	mg/Kg wet	0.100		94.5	70-130			
Nonane	0.107	0.0010	mg/Kg wet	0.100		107	30-130			
Pentane	0.109	0.0010	mg/Kg wet	0.100		109	70-130			
Toluene	0.111	0.0010	mg/Kg wet	0.100		111	70-130			
1,2,4-Trimethylbenzene	0.101	0.0010	mg/Kg wet	0.100		101	70-130			
2,2,4-Trimethylpentane	0.110	0.0010	mg/Kg wet	0.100		110	70-130			
m+p Xylene	0.206	0.0020	mg/Kg wet	0.200		103	70-130			
o-Xylene	0.109	0.0010	mg/Kg wet	0.100		109	70-130			
Surrogate: 2,5-Dibromotoluene (FID)	0.0416		mg/Kg wet	0.0400		104	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	0.0413		mg/Kg wet	0.0400		103	70-130			

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B156172 - MA VPH										
LCS Dup (B156172-BSD1)										
Prepared & Analyzed: 08/16/16										
Benzene	0.115	0.0010	mg/Kg wet	0.100		115	70-130	0.0576	25	
Butylcyclohexane	0.102	0.0010	mg/Kg wet	0.100		102	70-130	1.26	25	
Decane	0.127	0.0010	mg/Kg wet	0.100		127	70-130	2.57	25	
Ethylbenzene	0.101	0.0010	mg/Kg wet	0.100		101	70-130	0.582	25	
Methyl tert-Butyl Ether (MTBE)	0.116	0.0010	mg/Kg wet	0.100		116	70-130	1.20	25	
2-Methylpentane	0.104	0.0010	mg/Kg wet	0.100		104	70-130	2.03	25	
Naphthalene	0.101	0.010	mg/Kg wet	0.100		101	70-130	6.60	25	
Nonane	0.111	0.0010	mg/Kg wet	0.100		111	30-130	3.44	25	
Pentane	0.111	0.0010	mg/Kg wet	0.100		111	70-130	0.994	25	
Toluene	0.111	0.0010	mg/Kg wet	0.100		111	70-130	0.0494	25	
1,2,4-Trimethylbenzene	0.100	0.0010	mg/Kg wet	0.100		100	70-130	0.688	25	
2,2,4-Trimethylpentane	0.108	0.0010	mg/Kg wet	0.100		108	70-130	1.48	25	
m+p Xylene	0.205	0.0020	mg/Kg wet	0.200		103	70-130	0.636	25	
o-Xylene	0.109	0.0010	mg/Kg wet	0.100		109	70-130	0.460	25	
Surrogate: 2,5-Dibromotoluene (FID)	0.0410		mg/Kg wet	0.0400		103	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	0.0410		mg/Kg wet	0.0400		102	70-130			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B156107 - % Solids

Duplicate (B156107-DUP5)

Source: 16H0673-01

Prepared: 08/15/16 Analyzed: 08/16/16

% Solids	86.6		% Wt			88.0		1.60	20	
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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
RL-05	Elevated reporting limit due to high concentration of target compounds. MA CAM reporting limit not met.
RL-11	Elevated reporting limit due to high concentration of target compounds.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
MADEP-VPH-04-1.1 in Soil	
Unadjusted C5-C8 Aliphatics	CT,NC,ME,NH-P
C5-C8 Aliphatics	CT,NC,ME,NH-P
Unadjusted C9-C12 Aliphatics	CT,NC,ME,NH-P
C9-C12 Aliphatics	CT,NC,ME,NH-P
C9-C10 Aromatics	CT,NC,ME,NH-P
Benzene	CT,NC,ME,NH-P
Ethylbenzene	CT,NC,ME,NH-P
Methyl tert-Butyl Ether (MTBE)	CT,NC,ME,NH-P
Naphthalene	CT,NC,ME,NH-P
Toluene	CT,NC,ME,NH-P
m+p Xylene	CT,NC,ME,NH-P
o-Xylene	CT,NC,ME,NH-P
MADEP-VPH-04-1.1 in Water	
Unadjusted C5-C8 Aliphatics	CT,NC,ME,NH-P
C5-C8 Aliphatics	CT,NC,ME,NH-P
Unadjusted C9-C12 Aliphatics	CT,NC,ME,NH-P
C9-C12 Aliphatics	CT,NC,ME,NH-P
C9-C10 Aromatics	CT,NC,ME,NH-P
Benzene	CT,NC,ME,NH-P
Ethylbenzene	CT,NC,ME,NH-P
Methyl tert-Butyl Ether (MTBE)	CT,NC,ME,NH-P
Naphthalene	CT,NC,ME,NH-P
Toluene	CT,NC,ME,NH-P
m+p Xylene	CT,NC,ME,NH-P
o-Xylene	CT,NC,ME,NH-P
SW-846 8260B in Soil	
Acetone	NC
Acrylonitrile	NC
tert-Amyl Methyl Ether (TAME)	NC
Benzene	NC
Bromobenzene	NC
Bromochloromethane	NC
Bromodichloromethane	NC
Bromoform	NC
Bromomethane	NC
2-Butanone (MEK)	NC
tert-Butyl Alcohol (TBA)	NC
n-Butylbenzene	NC
sec-Butylbenzene	NC
tert-Butylbenzene	NC
tert-Butyl Ethyl Ether (TBEE)	NC
Carbon Disulfide	NC
Carbon Tetrachloride	NC
Chlorobenzene	NC
Chlorodibromomethane	NC
Chloroethane	NC

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260B in Soil</i>	
Chloroform	NC
Chloromethane	NC
2-Chlorotoluene	NC
4-Chlorotoluene	NC
1,2-Dibromo-3-chloropropane (DBCP)	NC
1,2-Dibromoethane (EDB)	NC
Dibromomethane	NC
1,2-Dichlorobenzene	NC
1,3-Dichlorobenzene	NC
1,4-Dichlorobenzene	NC
trans-1,4-Dichloro-2-butene	NC
Dichlorodifluoromethane (Freon 12)	NC
1,1-Dichloroethane	NC
1,2-Dichloroethane	NC
1,1-Dichloroethylene	NC
cis-1,2-Dichloroethylene	NC
trans-1,2-Dichloroethylene	NC
1,2-Dichloropropane	NC
1,3-Dichloropropane	NC
2,2-Dichloropropane	NC
1,1-Dichloropropene	NC
cis-1,3-Dichloropropene	NC
trans-1,3-Dichloropropene	NC
Diethyl Ether	NC
Diisopropyl Ether (DIPE)	NC
1,4-Dioxane	NC
Ethylbenzene	NC
Hexachlorobutadiene	NC
2-Hexanone (MBK)	NC
Isopropylbenzene (Cumene)	NC
p-Isopropyltoluene (p-Cymene)	NC
Methyl tert-Butyl Ether (MTBE)	NC
Methylene Chloride	NC
4-Methyl-2-pentanone (MIBK)	NC
Naphthalene	NC
n-Propylbenzene	NC
Styrene	NC
1,1,1,2-Tetrachloroethane	NC
1,1,2,2-Tetrachloroethane	NC
Tetrachloroethylene	NC
Tetrahydrofuran	NC
Toluene	NC
1,2,3-Trichlorobenzene	NC
1,2,4-Trichlorobenzene	NC
1,3,5-Trichlorobenzene	NC
1,1,1-Trichloroethane	NC
1,1,2-Trichloroethane	NC

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260B in Soil</i>	
Trichloroethylene	NC
Trichlorofluoromethane (Freon 11)	NC
1,2,3-Trichloropropane	NC
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NC
1,2,4-Trimethylbenzene	NC
1,3,5-Trimethylbenzene	NC
Vinyl Chloride	NC
m+p Xylene	NC
o-Xylene	NC
<i>SW-846 8260B in Water</i>	
Acetone	NC
Acrylonitrile	NC
tert-Amyl Methyl Ether (TAME)	NC
Benzene	NC
Bromobenzene	NC
Bromochloromethane	NC
Bromodichloromethane	NC
Bromoform	NC
Bromomethane	NC
2-Butanone (MEK)	NC
tert-Butyl Alcohol (TBA)	NC
n-Butylbenzene	NC
sec-Butylbenzene	NC
tert-Butylbenzene	NC
tert-Butyl Ethyl Ether (TBEE)	NC
Carbon Disulfide	NC
Carbon Tetrachloride	NC
Chlorobenzene	NC
Chlorodibromomethane	NC
Chloroethane	NC
Chloroform	NC
Chloromethane	NC
2-Chlorotoluene	NC
4-Chlorotoluene	NC
1,2-Dibromo-3-chloropropane (DBCP)	NC
1,2-Dibromoethane (EDB)	NC
Dibromomethane	NC
1,2-Dichlorobenzene	NC
1,3-Dichlorobenzene	NC
1,4-Dichlorobenzene	NC
trans-1,4-Dichloro-2-butene	NC
Dichlorodifluoromethane (Freon 12)	NC
1,1-Dichloroethane	NC
1,2-Dichloroethane	NC
1,1-Dichloroethylene	NC
cis-1,2-Dichloroethylene	NC

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260B in Water</i>	
trans-1,2-Dichloroethylene	NC
1,2-Dichloropropane	NC
1,3-Dichloropropane	NC
2,2-Dichloropropane	NC
1,1-Dichloropropene	NC
cis-1,3-Dichloropropene	NC
trans-1,3-Dichloropropene	NC
Diethyl Ether	NC
Diisopropyl Ether (DIPE)	NC
1,4-Dioxane	NC
Ethylbenzene	NC
Hexachlorobutadiene	NC
2-Hexanone (MBK)	NC
Isopropylbenzene (Cumene)	NC
p-Isopropyltoluene (p-Cymene)	NC
Methyl tert-Butyl Ether (MTBE)	NC
Methylene Chloride	NC
4-Methyl-2-pentanone (MIBK)	NC
Naphthalene	NC
n-Propylbenzene	NC
Styrene	NC
1,1,1,2-Tetrachloroethane	NC
1,1,2,2-Tetrachloroethane	NC
Tetrachloroethylene	NC
Tetrahydrofuran	NC
Toluene	NC
1,2,3-Trichlorobenzene	NC
1,2,4-Trichlorobenzene	NC
1,3,5-Trichlorobenzene	NC
1,1,1-Trichloroethane	NC
1,1,2-Trichloroethane	NC
Trichloroethylene	NC
Trichlorofluoromethane (Freon 11)	NC
1,2,3-Trichloropropane	NC
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NC
1,2,4-Trimethylbenzene	NC
1,3,5-Trimethylbenzene	NC
Vinyl Chloride	NC
m+p Xylene	NC
o-Xylene	NC

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The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2018
MA	Massachusetts DEP	M-MA100	06/30/2017
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2017
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2017
RI	Rhode Island Department of Health	LAO00112	12/30/2016
NC	North Carolina Div. of Water Quality	652	12/31/2016
NJ	New Jersey DEP	MA007 NELAP	06/30/2017
FL	Florida Department of Health	E871027 NELAP	06/30/2017
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2017
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2016
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028



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Email: info@contestlabs.com
http://www.contestlabs.com

Company Name: Terracon Telephone: 919-436-2964

Address: 2401 Brentwood Road # 107 Project # 270546540P

Attention: Justin Fabrizio Client PO# 70167318

Project Location: Raleigh, NC Employment Security Commission

Sampled By: CMP/DWM Email: justin.fabrizio@terracon.com

Project Proposal Provided? (for billing purposes) yes no proposal date _____

DATA DELIVERY (check all that apply)
 FAX EMAIL WEBSITE
 PDF EXCEL OGIS
 OTHER _____

Con-Test Lab ID <small>(laboratory use only)</small>	Client Sample ID / Description	Collection		Composite	Grab	*Matrix Code	Conc Code
		Beginning Date/Time	Ending Date/Time				
01	SB-01 (16-10)	8/11/16	17:30		✓	S	
02	TW-01		17:00			GW	
03	TW-02		18:05			GW	
04	TW-03		15:10			GW	
05	TW-04		15:50			GW	
06	TW-05		18:40			GW	
07	SB-01 (10-12)		17:40		✓	S	
08	DW-1	8/12/16	13:30		✓	GW	
09	MW-1		14:00		✓	GW	
10	SW-2		12:45		✓	GW	

Analysis Requested: MADEP VPH (soil)
VOCs 8260 (soil)
MADEP VPH (water)
VOCs 8260 (water)
VOCs 8260
only
VOCs 8260

Comments: _____
 Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
 H - High; M - Medium; L - Low; C - Clean; U - Unknown

Requisitioned by (signature): [Signature] Date/Time: 8/12/16 15:45

Received by (signature): [Signature] Date/Time: 8/12/16 15:45

Relinquished by (signature): [Signature] Date/Time: 8/12/16 17:30

Received by (signature): [Signature] Date/Time: 8/13/16 10:01

Turnaround: 5-Day
 5-7-Day
 10-Day
 RUSH
 24-Hr r 48-Hr
 72-Hr r 4-Day
 * Requires Lab Approval

Detection Limit Requirements: North Carolina
 2L
 GWPC
 SWSL
 OTHER

Program Information:
 DSCA
 IHSB Orphaned Landfill
 SWS Landfill
 UST
 REC
 Other: _____

NECAC ACCREDITED IN ACCORDANCE WITH AIHA NELAC & AIHA Certified WBE/DBE Certified

TURNAROUND TIME (business days) STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED.

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Page 2 of 2

Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
http://www.contestlabs.com



Company Name: Terracon
Address: 2401 Brentwood Road #107
Raleigh, NC 27604
Attention: Justin Fabriczani
Project Location: Employment Security Commission
Sampled By: CMP JDWM
Telephone: 919-436-462964
Project # 16H0673
Client PO# 70167318
DATA DELIVERY (check all that apply)
 FAX EMAIL WEBSITE
Email: justin.fabriczani@terracon.com
Format: EXCEL OGIS OTHER

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection		Composite	*Matrix Code	Conc Code
		Beginning Date/Time	Ending Date/Time			
11	SW-A	8/2/16	11:25	✓	GW	
12	SW-B	↓	10:10	↓	GW	
13	SW-C	↓	12:00	↓	GW	

Project Proposal Provided? (for billing purposes)
 yes proposal date

Relinquished by: (signature)	Date/Time	Turnaround ^{††}	Detection Limit Requirements
<u>Cory Pate</u>	8/2/16 15:45	<input checked="" type="checkbox"/> 5-Day	North Carolina <input checked="" type="checkbox"/> 2L
<u>Justin Fabriczani</u>	8/2/16 15:45	<input type="checkbox"/> 5-7-Day	<input type="checkbox"/> GWPC
<u>Justin Fabriczani</u>	8/2/16 17:30	<input type="checkbox"/> 10-Day	<input type="checkbox"/> SWSL
<u>Justin Fabriczani</u>	8/2/16 17:30	<input type="checkbox"/> RUSH	<input type="checkbox"/> OTHER
<u>Justin Fabriczani</u>	8/2/16 17:30	<input type="checkbox"/> '24-Hr r '48-Hr	
<u>Justin Fabriczani</u>	8/2/16 17:30	<input type="checkbox"/> '72-Hr r '4-Day	
<u>Justin Fabriczani</u>	8/2/16 17:30	<input type="checkbox"/> Requires Lab Approval	

# of Containers	** Preservation	*** Container Code	Analysis Requested
3	H	V	VOCS 8260 (water)
3	H	V	MADP VPH (water)

****Cont. Code:**
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tiedlar bag
O=Other

****Preservation**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other

***Matrix Code:**
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other



NEELAC & AIHA Certified
WBE/DBE Certified

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IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

39 Spruce St.
 East Longmeadow, MA. 01028
 P: 413-525-2332
 F: 413-525-6405
 www.contestlabs.com



Sample Receipt Checklist

CLIENT NAME: Terracem RECEIVED BY: RF DATE: 8/13/16

1) Was the chain(s) of custody relinquished and signed? Yes No No COC Incl.
 2) Does the chain agree with the samples? Yes No
 If not, explain:

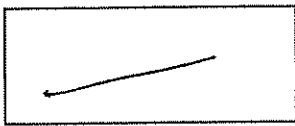
3) Are all the samples in good condition? Yes No
 If not, explain:

4) How were the samples received:
 On Ice Direct from Sampling Ambient In Cooler(s)
 Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 5.4 , 3.8

5) Are there Dissolved samples for the lab to filter? Yes No
 Who was notified _____ Date _____ Time _____

6) Are there any RUSH or SHORT HOLDING TIME samples? Yes No
 Who was notified _____ Date _____ Time _____

7) Location where samples are stored:  Permission to subcontract samples? Yes No
 (Walk-in clients only) if not already approved
 Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No N/A

9) Do all samples have the proper Base pH: Yes No N/A

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		16 oz amber	
500 mL Amber		8 oz amber/clear jar	
250 mL Amber (8oz amber)		4 oz amber/clear jar	
1 Liter Plastic		2 oz amber/clear jar	2
500 mL Plastic		Plastic Bag / Ziploc	
250 mL plastic		SOC Kit	
40 mL Vial - type listed below	59	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

40 mL vials: # HCl 51 # Methanol 4 Time and Date Frozen:
 Doc# 277 # Bisulfate 4 # DI Water _____
 Rev. 4 August 2013 # Thiosulfate _____ Unpreserved _____

Login Sample Receipt Checklist
 (Rejection Criteria Listing - Using Sample Acceptance Policy)
 Any False statement will be brought to the attention of Client

Question	Answer (True/False)	Comment
	T/F/NA	
1) The cooler's custody seal, if present, is intact.	T	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	N/A	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	N/A	
19) Trip blanks provided if applicable.	N/A	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T	
21) Samples do not require splitting or compositing.	T	

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Who notified of False statements?
 Log-In Technician Initials:

Date/Time:
 Date/Time:

RLT 8/13/10 1001